



COUNTY COUNCIL OF NORTHUMBERLAND.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH,
WM. F. J. WHITLEY, M.D., D.P.H., F.R.S.E.,

for the Year 1938.

NEWCASTLE UPON TYNE:

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NORTHUMBERLAND COUNTY COUNCIL.

REPORT OF THE COUNTY MEDICAL OFFICER OF HEALTH FOR THE YEAR ENDED 31ST DECEMBER, 1938.

TO THE CHAIRMAN AND MEMBERS OF THE COUNTY COUNCIL
OF NORTHUMBERLAND.

MR. CHAIRMAN, MY LORDS, LADIES AND GENTLEMEN,

I beg to present my annual report for the year 1938. The report has been drawn up on the lines indicated by the Minister of Health in his Circular No. 1728 relating to the contents and arrangements of the annual reports of medical officers of health for the year 1938.

Vital and Mortality Statistics.—The vital and mortality statistics of the various county districts have been calculated and are included in the report. The variations in the principal county rates during recent years are indicated in the following table. The corresponding rates for England and Wales are given for comparison :—

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Birth rate (per 1,000 living)										
Administrative county	16·79	17·13	16·66	15·94	15·42	15·48	15·53	15·26	15·16	15·00
England and Wales	16·3	16·3	15·8	15·3	14·4	14·8	14·7	14·8	14·9	15·1
General death rate (per 1,000 living)										
Administrative county	12·22	11·02	12·24	11·33	11·93	11·78	11·62	12·02	12·67	11·76
England and Wales	13·4	11·4	12·3	12·0	12·3	11·8	11·7	12·1	12·4	11·6
Infant mortality rate (per 1,000 births)										
Administrative county	81	62	77	67	71	69	71	70	66	65
England and Wales	74	60	66	65	64	59	57	59	58	53
Pneumonic death rate (per 1,000 living)										
Administrative county	0·65	0·23	0·41	0·25	0·31	0·43	0·32	0·30	0·26	0·31
England and Wales	0·47	0·37	0·32	0·33	0·29	0·34	0·24	0·30	0·23	0·23
Death rate from Respiratory Tuberculosis (per 1,000 living)										
Administrative county	0·74	0·78	0·75	0·68	0·65	0·60	0·53	0·55	0·54	0·40
England and Wales	0·79	0·74	0·74	0·69	0·69	0·63	0·60	0·58	0·58	0·53

The birth rate again shewed a decline, being the lowest ever recorded in the county ; it was also lower than that recorded for England and Wales.

The general death rate shewed a slight decrease compared with that for the previous year ; it was also the lowest recorded since 1935.

The infant mortality rate shewed a further decline, being the lowest recorded since 1930.

The death rate from zymotic diseases was slightly higher than that recorded for the previous year, and was the highest recorded since 1935.

The death rate from respiratory tuberculosis (0.40 per 1,000 population) shewed a considerable decline compared with that for the previous year. The rate for 1938, besides being the lowest recorded in the county, was practically half that recorded for the year 1930, which was the highest during the past decade.

Annual Reports of District Medical Officers.

The following table shews the dates upon which the various reports were received :—

1939.

March. 15th, Blyth Port Sanitary Authority.

June. 14th, Castle Ward Rural District ; 24th, Glendale Rural District ; 30th, Alnwick Rural District.

July. 1st, Morpeth Borough ; Norham and Islandshires Rural District.

August. 9th, River Tyne Port Sanitary Authority ; 11th, Alnwick Urban District ; 12th, Hexham Rural District ; 15th, Newbiggin-by-the-Sea Urban District ; 21st, Haltwhistle Rural District ; 22nd, Newburn Urban District ; 24th, Hexham Urban District.

September. 9th, Gosforth Urban District.
11th, Ashington Urban District ; Whitley and Monkseaton Urban District ; Rothbury Rural District.
22nd, Seaton Valley Urban District ; Morpeth Rural District.
26th, Longbenton Urban District.

October. 16th, Berwick-upon-Tweed Borough.
23rd, Bedlingtonshire Urban District.

November. 13th, Wallsend Borough.

1940.

January. 4th, Blyth Borough.

February. 8th, Bellingham Rural District.

The reports for the urban districts of Amble and Prudhoe, and the rural district of Belford had not been received up to the time of going to Press—May 3rd, 1940.

Administration.

The official, technical and administrative staff under the direction of the County Medical Officer consists of :—

Assistant to the County Medical Officer	John B. Tilley, M.D., B.HY., D.P.H.
County Bacteriologist	Andrew I. Messer, M.A., M.B., CH.B., D.P.H.
Maternity and Child Welfare Officer and Chief Supervisor of Midwives ...	Janet M. Jamieson, M.B., CH.B., D.P.H.
County Tuberculosis Officer (Clinical)	Francis L. Moore, M.B., CH.B.
The Medical Superintendent of the Council's Sanatorium at Wooley, and Tuberculosis Officer	Robert Cunningham, M.B., CH.B., D.P.H.
Senior Assistant School Medical Officer	Wm. J. Pierce, M.B., CH.B., D.P.H.
Assistant County Medical Officer and Infant Welfare Centre M.O. ...	O'Connell O'Sullivan, M.C., M.B., CH.B., B.A.O.
Do. do. ...	Mary W. Dewell, M.B., B.S.
Do. do. ...	Anna M. Reid, M.B., CH.B., D.P.H.
Assistant County Medical Officer ...	*John A. Smail, M.B., CH.B.
Do. ...	*Grahame Patton, L.R.C.P. & S.I., D.P.H.
Assistant County Bacteriologist ...	Eleanor J. M. Anderson, D.Sc.
Assistant Medical Superintendent of the Council's Sanatorium at Wooley... ..	J. F. E. Johnson, M.B., CH.B.
Thoracic Surgeon	*Geo. Alex. Mason, M.B., B.S., F.R.C.S.
Orthopaedic Surgeon	*William Mackenzie, F.R.C.S.E.
Ophthalmic Surgeon	*Alexander Macrae, M.B., CH.B., D.O.M.S.
Senior Dental Officer	Arnold E. Robinson, L.D.S.
Dental Officer	Catherine M. Anderson, L.D.S.
Do.	Frederick J. Gilbertson, L.D.S.
Do.	Thomas A. Ireland, L.D.S.
Do.	Wm. J. Irvine, L.D.S.
Do.	Ernest M. Pickering, L.D.S.
Do.	Frank E. Street, L.D.S.

Also three female dental attendants.

* Part-time.

County Health Inspectors	...	...	Chas. Ward, C.R.S. Inst., Cert. M. & F., M.S.I.A. James Atkinson, C.R.S. Inst., M.S.I.A.
Chief Clerk	...	...	E. T. I'Anson.
Acting County Analyst	...	...	*H. C. L. Bloxam, F.I.C.
Matron of the Council's Sanatorium			
at Wooley	...	...	Catherine Connor, S.R.N.
Superintendent Health Visitor	...		Hannah Weir, M.B.E., S.R.N., S.C.M., H.V. Cert., R.S.I., S.I., Cert. R.S.I., Maternity and Child Welfare Cert.

* Part-time.

Health Visitors, School Nurses, Tuberculosis Nurses and Dental Nurses.

Kathleen Maud Adams, S.R.N., S.C.M., H.V. Cert.
 Ruth Atkinson, S.R.N., S.C.M.
 Bertha Barker, S.R.N., S.C.M.
 Nellie Hamilton Bird, S.I.C.
 Lucy Esmee Brewis, S.R.N., S.C.M., H.V. Cert.
 Elsie Broadbent, S.R.N., S.C.M., H.V. Cert.
 Hilda Jane Gibson Bruce, S.R.N., S.C.M., H.V. Cert.
 Mary Wilberforce Crofton, S.R.N., S.C.M., H.V. Cert.
 Eleanor Crosby, S.R.N., S.C.M., H.V. Cert.
 Elsie May Dodds, S.R.N., S.C.M.
 Eva Phyllis Eldridge, S.R.N., S.C.M., H.V. Cert.
 Martha Gibson, S.R.N., S.C.M.
 Mary Gill, S.R.N., S.C.M., H.V. Cert.
 Beatrice Mary Goodban, S.R.N., S.C.M.
 Ellen Grehan, S.R.N., S.C.M.
 Alice Gwendoline Isabel Harper, S.R.N., S.C.M., H.V. Cert.
 Gertrude Harrison, S.R.N., S.C.M., H.V. Cert.
 Marjorie Heaton, S.R.N., S.C.M., H.V. Cert.
 Edith May Ironside, S.R.N., S.C.M., H.V. Cert.
 Gertrude Priscilla Ironside, S.R.N., S.C.M., H.V. Cert.
 Ada Kay, S.R.N., S.C.M.
 Dorothy Gilbert Long, S.R.N., S.C.M., H.V. Cert.
 Doris Stewart McConville, S.R.N., S.C.M., H.V. Cert.
 Annie McDermott, S.R.N., S.C.M.
 Anabella McLeod, S.R.N., S.C.M.
 Lyla Catherine Symon Macpherson, S.R.N., S.C.M., H.V. Cert.
 Violet Morrison, S.R.N., S.C.M., H.V. Cert.
 Catherine Rees, S.R.N., S.C.M., H.V. Cert.
 Edith Elizabeth Rimer, S.R.N., S.C.M., H.V. Cert.
 Buddug Roberts, S.R.N., S.C.M.

Ena Rowland, S.R.N., S.C.M., H.V. Cert.
 Katharine Smith, S.R.N., S.C.M., H.V. Cert.
 Edna Godfrey Thomson, S.R.N., S.C.M., H.V. Cert.
 Frances Turnbull, S.R.N., S.C.M.
 Alice Walkden, S.R.N., S.C.M., H.V. Cert.
 Emma Weston, S.R.N., S.C.M., H.V. Cert.
 Eva Wolfenden, S.R.N., S.C.M., H.V. Cert.

Tuberculosis Nurse (only)—

Ida Emile Bodin, S.R.N., S.C.M., H.V. Cert.

Midwives—

Border, Hannah, S.C.M.
 Hedderly, Dorothy, S.C.M.
 Ormsby, Julia Florence, S.C.M.
 Parkinson, Louisa, S.C.M.

Orthopaedic Sisters—

Alice M. Rogers, C.S.S.M.G.
 Joyce M. Woodford, C.S.S.M.G.

Blind Persons Act.

Supervisor of Blind Welfare—

Hilda A. Rimer.

Home Visitors—

Mary Davison Taws.
 Dorothy L. Shannon.
 Ruth Robinson.

There was also during 1938 a clerical staff at the Central Office of 14 (including two laboratory assistants, one clerk and one junior at the County Laboratory at Newburn).

In addition to the staff specified above, there were employed at Wooley Sanatorium :—

1 Clerk-Steward	1 Porter
1 Engineer	1 Boilerman
2 Enginemen	1 General Workman
4 Gardeners	

Nursing Staff :

1 Home Sister	7 Staff Nurses
4 Ward Sisters	12 Probationers.

S.R.N.—State Registered Nurse.

S.C.M.—State Certified Midwife.

H.V. Cert.—Health Visitor Certificate of the Royal Sanitary Institute.

S.I.C.—Sanitary Inspector's Certificate of the Royal Sanitary Institute.

Domestic Staff :

1 Cook	1 Nurses' Maid
1 Laundress	2 House Maids
3 Laundry Maids	2 Patients' Dining Hall Maids
2 Sewing Maids	5 Ward Maids
1 Staff and Store Maid	5 Kitchen Maids
1 Matron's Maid	2 Scullery Maids

ADDITIONAL OFFICERS.

MEDICAL OFFICERS OF INFANT WELFARE CENTRES AND
ANTE-NATAL CLINICS.*(a) Infant Welfare Centres.*

Centre.	Medical Officer.
Allendale ...	...H. C. Bourke, M.B., B.CH.
Alnwick ...	*Anna M. Reid, M.B., CH.B., D.P.H.
Amble ...	*O'Connell O'Sullivan, M.C., M.B., B.CH., B.A.O.
Backworth ...	...Glen Davison, M.D., B.S.
Belford ...	...D. T. McDonald, M.B., CH.B.
Berwick ...	...P. W. MacLagan, M.D., CH.B.
Burradon ...	...Jane H. Thompson, M.A., M.B., CH.B.
Corbridge ...	...J. N. Turnbull, M.B., CH.B., F.R.C.S. Edin.
Cramlington ...	...T. C. Quinn, M.B., CH.B.
Dinnington Colliery	...A. M. McLeod, M.B., CH.B.
Dudley ...	...T. Craig, M.B., CH.B.
Forest Hall ...	*Janet M. Jamieson, M.B., CH.B., D.P.H., Maternity and Child Welfare Officer.
Haltwhistle ...	...Jane H. Thompson, M.A., M.B., CH.B.
Haydon Bridge	...H. W. T. Hall, M.B., B.S.
Hexham ...	... <i>Rota consisting of :</i> R. A. M. Dickson, M.B., B.S., J. J. Hurley, M.B., CH.B., G. E. Lloyd, M.C., M.D., C. McCulloch, L.R.C.P., L.R.C.S., L.R.F.P.S., L. R. Routledge, M.B., B.S., W. M. Stewart, M.B., CH.B.
Lynemouth ...	...T. Skene, M.B., CH.B., L.R.C.P.
Morpeth ...	...Hugh Dickie, M.B., CH.B.
Newbiggin ...	...J. Angus, M.B., CH.B.
North Seaton ...	...J. Angus, M.B., CH.B.
Pegswood ...	...Hugh Dickie, M.B., CH.B.
Ponteland ...	...Evelyn H. Bolt, M.B., B.S.
Prudhoe ...	*Mary W. Dewell, M.B., B.S.
Red Row ...	...R. E. Moyes, M.D., and W. G. Scott, L.R.C.P., L.R.C.S., L.R.F.P.S.
Rothbury ...	...Evelyn H. Bolt, M.B., B.S.
Seaton Burn ...	...S. E. V. Gordon, M.B., B.CH., B.A.O.
Seaton Delaval	...A. G. Ogilvie, M.B., B.S., M.R.C.P.
Seghill ...	...P. Henderson, M.D., L.R.C.P., L.R.C.S.
Shiremoor ...	...Jane H. Thompson, M.A., M.B., CH.B.
Stocksfield ...	...A. G. Ogilvie, M.B., B.S., M.R.C.P.
West Allotment	...Jane H. Thompson, M.A., M.B., CH.B.

* Also included under "Administration" page 8.

(a) Infant Welfare Centres—continued.

Centre.	Medical Officer.
West Monkseaton	...Jane H. Thompson, M.A., M.B., CH.B.
Whitley Bay	...Jane H. Thompson, M.A., M.B., CH.B.
Widdrington Colliery	...E. A. Welsh, M.D.
Wooler	...A. N. Bousfield, M.B., B.S.

(b) Ante-Natal Clinics.

Clinic.	Medical Officer.
Amble	... <i>Rota consisting of:</i> J. A. Loughridge, M.B., CH.B., L. V. McNabb, M.B., B.S., and R. E. Moyes, M.D.
Burradon	...Jane H. Thompson, M.A., M.B., CH.B.
Cramlington	...T. C. Quinn, M.B., CH.B.
Dinnington Colliery	...A. M. McLeod, M.B., CH.B.
Dudley	...T. Craig, M.B., CH.B.
Forest Hall	*Janet M. Jamieson, M.B., CH.B., D.P.H., Maternity and Child Welfare Officer.
Haltwhistle	...Jane H. Thompson, M.A., M.B., CH.B.
Hexham	... <i>Rota consisting of:</i> R. A. M. Dickson, M.B., B.S., J. J. Hurley, M.B., CH.B., G. E. Lloyd, M.C., M.D., C. McCulloch, L.R.C.P., L.R.C.S., L.E.P.S., L. R. Routledge, M.B., B.S., W. M. Stewart, M.B., CH.B.
Lynemouth	...T. Skene, M.B., CH.B., L.R.C.P.
Newbiggin	...J. Angus, M.B., CH.B.
Ponteland	...Evelyn H. Bolt, M.B., B.S.
Prudhoe	...G. McCoull, M.B., B.S., L.R.C.P., L.R.C.S., H. A. Lockhart, M.B., B.S.
Shiremoor	...Jane H. Thompson, M.A., M.B., CH.B.
Stocksfield	...H. A. Lockhart, M.B., B.S.
Whitley Bay	...Jane H. Thompson, M.A., M.B., CH.B.

OBSTETRIC CONSULTANTS UNDER MIDWIVES AND MATERNITY AND CHILD
WELFARE ACTS.

Robert P. Ranken Lyle, M.D., B.A.O., L.R.C.P.I.
 Ernest Farquhar Murray, M.D., F.R.C.S.
 Henry Harvey Evers, M.S., F.R.C.S.
 Francis E. Stabler, M.D., F.R.C.S.
 William Hunter, M.D., M.C.O.G.

* Also included under "Administration" page 8.

DISTRICT MEDICAL OFFICERS UNDER POOR LAW ACTS.

Guardians' Committee.	District.	County Area.	Medical Officer.
North No. 2	Alnwick ...	...Alnwick U.D.	*J. A. MacLeod, M.B., CH.B., D.P.H.
	Embleton ...	...Alnwick R.D.	...W. Hall, M.B., B.S.
	Felton... ...	...Do.	...R. A. Welsh, M.B., B.S.
	Glanton ...	...Do.	...B. W. E. Trevor-Roper, M.R.C.S., L.R.C.P., M.B., CH.B.
	Lesbury ...	...Do.	...R. E. Moyes, M.D., M.B., CH.B.
	Shilbottle ...	...Do.	...B. W. E. Trevor-Roper, M.R.C.S., L.R.C.P., M.B., CH.B.
	Warkworth ...	...Amble U.D. Alnwick R.D.	...L. V. McNabb, M.B., B.S.
North No. 1	West ...	...Belford R.D.	...J. McDonald, M.D.
	East ...	...Do.	...F. B. Macaskie, L.R.C.P., L.R.C.S., L.R.F.P.S.
West ...	...Bellingham No. 1	...Bellingham R.D.	...M. K. Dunlop, M.B., CH.B.
	Do. No. 2	...Do.	...Do.
	Do. No. 3	...Do.	...G. W. L. Kirk, M.B., CH.B.
	Do. No. 4	...Do.	...Do.
	Do. No. 5	...Do.	...Wm. Murdie, M.B., CH.B.
	Do. No. 6	...Do.	...R. J. Carr, M.B., B.S.
North No. 1	Berwick ...	...Berwick Borough	*W. R. Sprunt, M.B., CH.B.
	Norhamshire ...	...Norham & Island- shires R.D.	...H. F. Park, M.B., CH.B.
	Islandshire ...	...Do.	...John Elliott, L.R.C.P., L.R.C.S., L.R.F.P.S.
South...	...Gosforth ...	...Gosforth U.D.	...Panel system in operation.
West ...	...Lemington ...	...Newburn U.D. (part of)	...H. C. Coxon, M.D.
	Newburn ...	...Do.	...G. B. Picton, M.B., B.S.
Central	...Ponteland ...	...Castle Ward R.D. (part of)	*Willmot Holmes, M.R.C.S., L.R.C.P.
	Stamfordham...	...Do.	...R. J. Carr, M.B., B.S.
	Stannington ...	...Do.	A. R. Waterhouse, M.R.C.S., L.R.C.P.
North No. 1	Carham ...	...Glendale R.D.	...F. Henderson, M.D.
	Chatton ...	...Do.	...A. N. Bousfield, M.B., B.S.
	Ford ...	...Do.	...V. E. Badcock (M.C.), M.D.
	Glendale Southern	...Do.	...B. W. E. Trevor-Roper, M.R.C.S., L.R.C.P., M.B., CH.B.
	Lowick ...	...Do.	...John Elliott, L.R.C.P., L.R.C.S., L.R.F.P.S.
	Wooler ...	...Do.	...A. N. Bousfield, M.B., B.S.
West ...	...Haltwhistle Eastern	...Haltwhistle R.D.	...R. D. Burn, M.B., B.S.
	Do. Western...	...Do.	...J. M. Glasce, M.B., CH.B.
	Do. Southern	...Do.	...W. S. Dalgetty, M.B., CH.B.
	Whitfield ...	...Do.	...H. C. Bourke, M.B., B.CH., B.A.O., B.A.
	Hexham ...	...Hexham U.D. Hexham R.D.	*W. M. Stewart, M.B., CH.B.

* Also acts as Medical Officer for the Poor Law Institution.

Guardians' Committee.	District.	County Area.	Medical Officer.
West—contd.	Slaley ...	...Hexham R.D.	...W. M. Stewart, M.B., CH.B.
	Shotley ...	...Do.	...J. Murray, M.B., CH.B., B.A.O., R.U.I.
	Blanchland ...	...Do.	...K. M. MacDonald, M.B., CH.B.
	Humshaugh ...	...Do.	...Monica F. Bell, M.B., B.S.
	Haydon ...	...Do.	...Panel system in operation.
	Allendale ...	...Do.	...H. C. Bourke, M.B., B.CH., B.A.O., B.A.
	Wylam ...	...Prudhoe U.D. Hexham R.D.	...G. McCoull, M.B., B.S., L.R.C.P., L.R.C.S., L.R.F.P.S.
	Ovingham ...	...Prudhoe U.D. Hexham R.D.	Do. Do.
	Corbridge ...	...Do.	...D. N. Jackson (M.B.E.), M.B., B.S.
	Allenheads ...	...Do.	...H. C. Bourke, M.B., B.CH., B.A.O., B.A.
	Ninebanks ...	...Do.	...Do.
Central	...Morpeth No. 1	...Morpeth Borough	*Hugh Dickie, M.B., CH.B.
	Do. No. 2	...Morpeth R.D.	...R. L. Dagger, M.D., M.R.C.S., L.R.C.P.
	Do. No. 2A	...Ashington U.D. Morpeth R.D.	...G. R. Spence, M.B., CH.B. Do.
	Do. No. 3	...Bedlington U.D. Morpeth R.D.	...J. Brown, M.B., B.SC. Do.
	Do. No. 4	...Morpeth R.D.	...R. A. Welsh, M.B., B.S.
	Do. No. 5	...Do.	...R. L. Dagger, M.D., M.R.C.S., L.R.C.P.
	Do. No. 6	...Ashington U.D. (Hirst Ward)	...G. R. Spence, M.B., CH.B.
	Do. No. 6A	...Newbiggin U.D. Morpeth R.D.	...H. S. Brown, M.D., L.M.S.A. Do.
	Do. No. 7	...Do.	...Dr. Dickie acts when required.
	Do. No. 8	...Do.	...Hugh Dickie, M.B., CH.B.
North No. 2	Rothbury East	...Rothbury R.D.	...A. S. Hedley, M.B., B.S.
	Rothbury West	...Do.	...J. A. Smail, M.B., CH.B.
	Rothley ...	...Do.	...A. S. Hedley, M.B., B.S.
	Harbottle ...	...Do.	...R. S. Smail, M.B., CH.B. (Ed.)
	Elsdon... ...	...Do.	...Do.
	Whittingham...	...Do.	...A. Patterson, M.B.
Central	...Blyth ...	...Blyth Borough	...T. Gallacher, L.R.C.P., L.R.C.S., L.R.F.P.S.
South...	...Whitley ...	...Whitley & Monk- seaton U.D.	H. L. Pearson, M.B., CH.B.
	Seaton Delaval (Excluding the Old Parish of Hartley).	...Seaton Valley U.D.	E. M. Hall, M.B., B.S.
	Seghill... ...	...Do.	...P. Henderson, M.D., L.R.C.P., L.R.C.S., L.R.F.P.S.
	Cramlington ...	...Do.	...T. G. Quinn, M.B., CH.B.
	Earsdon ...	...Do.	...R. J. E. Christie, M.B., CH.B., B.A.O.
	(Including the Old Parish of Hartley).		
	North Longbenton	...Longbenton U.D.	...S. Fullerton, M.B., CH.B., B.S.A.
	Weetslade ...	...Do.	...T. Craig, M.B., CH.B.
	Wallsend ...	...Wallsend Borough (Part of)	H. H. Aitchison, M.B., L.R.C.P., L.R.C.S.
	Willington Quay	...Do.	...L. Craig, L.R.C.P., L.R.C.S., L.R.F.P.S.

* Also acts as Medical Officer for the Poor Law Institution.

PUBLIC VACCINATORS.

- H. H. Aitchison, M.B. (Ed.),
 L.R.C.P., L.R.C.S.
 V. E. Badcock (M.C.), M.D. (Durh.).
 M. F. Bell, M.B., B.S. (Durh.).
 R. Bell, M.B., CH.B. (Ed.).
 H. C. Bourke, M.B., B.CH., B.A.O.,
 B.A.
 A. N. Bousfield, M.B., B.S.
 H. S. Brown, M.D. (Durh.), L.M.S.S.A.
 (Lond.).
 R. D. Burn, M.B., B.S.
 R. J. Carr, M.B., B.S.
 *P. W. MacLagan (M.C.), M.D. (Ed.).
 R. J. E. Christie, M.B., CH.B.,
 B.A.O. (Belf.).
 H. C. Coxon, M.D. (Durh.).
 L. Craig, L.R.C.P., L.R.C.S. (Ed.),
 L.R.F.P.S. (Glas.).
 T. Craig, M.B., CH.B. (Ed.).
 R. L. Dagger, M.D. (Durh.), M.R.C.S.
 (Eng.), L.R.C.P. (Lond.).
 *H. Dickie, M.B., CH.B. (Glas.).
 M. K. Dunlop, M.B., CH.B. (Glas.).
 J. Elliott, L.R.C.P., L.R.C.S. (Ed.),
 L.R.F.P.S. (Glas.).
 S. Fullerton, M.B., B.CH., B.A.O.
 (Belf.).
 T. Gallacher, L.R.C.P., L.R.C.S. (Ed.),
 L.R.F.P.S. (Glas.).
 J. M. Glasse, M.B., CH.B. (Ed.).
 W. Hall, M.B., B.S. (Durh.).
 Evelyn M. Hall, M.B., B.S. (Durh.).
 A. S. Hedley, M.B., B.S. (Durh.).
 F. Henderson, (M.C.), M.B., CH.B.
 P. Henderson, M.D. (Durh.), L.R.C.P.,
 L.R.C.S. (Ed.), L.R.F.P.S. (Glas.).
 *W. Holmes, M.R.C.S. (Eng.), L.R.C.P.
 (Lond.).
 D. N. Jackson (M.B.E.), M.B., B.S.
 (Durh.).
 H. R. Kendal, M.B. (Durh.).
 G. W. L. Kirk, M.B., CH.B. (Leeds).
 F. B. Macaskie, L.R.C.P., L.R.C.S.
 (Ed.), L.R.F.P.S. (Glas.).
 G. McCoull, M.B., B.S. (Durh.),
 L.R.C.P., L.R.C.S. (Ed.),
 L.R.F.P.S. (Glas.).
 J. McDonald, M.D. (Ed.).
 K. M. MacDonald, M.B., CH.B. (Glas.).
 *J. A. McLeod, M.B., CH.B. (Ed.),
 D.P.H. (Ed. and Glas.).
 L. V. McNabb, M.B., B.S. (Durh.).
 W. Murdie, M.B., CH.B. (Ed.), M.A.
 J. Murray, M.B., CH.B., B.A.O.,
 R.U.I. (Cath. Un. Dub.).
 R. E. Moyes, M.D., M.B., CH.B. (Ed.).
 H. F. Park, M.B., CH.B. (Aberd.).
 A. Patterson, M.B. (Durh.).
 H. L. Pearson, M.B., CH.B.
 G. B. Picton, M.B., B.S. (Durh.).
 T. G. Quinn, M.B., CH.B. (St. And.).
 J. A. Smail, M.B., CH.B. (Ed.).
 R. S. Smail, M.B., CH.B., (Ed.).
 G. R. Spence, M.B., CH.B. (Glas.).
 *W. M. Stewart, M.B., CH.B. (Glas.).
 H. L. Taylor, M.B., CH.B. (Leeds).
 W. S. Dalgetty, M.B., CH.B. (Ed.).
 B. W. E. Trevor-Roper, M.R.C.S.,
 L.R.C.P. (Lond.), M.B., CH.B. (Vict.
 Manch.).
 A. R. Waterhouse, M.R.C.S., L.R.C.P.,
 R. A. Welsh, M.B., B.S. (Durh.).

* Also acts as Public Vaccinator for Poor Law Institution.

LIST OF VACCINATION OFFICERS.

Vaccination District.					Vaccination Officer.
Alnwick	...	...	...	...	N. A. Burke.
Embleton	...	...	...	...	A. Welsh.
Warkworth	...	...	...	...	G. S. Smetham.
Belford and Glendale	...	...	...	...	C. V. F. Cooke.
Bellingham	...	...	...	...	John R. Colling.
Berwick	...	...	...	...	John Smith.
Castle Ward	...	...	...	...	R. Reay, Jr.
Hexham	...	...	...	...	M. Atkin.
Allendale	...	...	...	...	T. A. Henderson.
Chollerton	...	...	...	...	J. Muir.
Bywell ...	...	...	...	...	W. J. Richardson.
Haltwhistle	...	...	...	...	Wm. Grant.
Ashington West	...	...	...	...	F. Darling.
Bedlington	...	...	...	...	John H. Jacques.
Morpeth	...	...	...	...	E. Stanley.
Rothbury	...	...	...	...	E. Heatley.
Blyth ...	...	...	...	...	R. Muter.
Whitley	...	...	...	...	R. Gibson.
Longbenton	...	...	...	...	C. A. Dixon.
Wallsend	...	...	...	...	J. Thomson.
Newburn	...	...	...	...	J. E. Cockburn.
Gosforth	...	...	...	...	F. Robertson.
Ashington East	...	...	...	...	J. A. Allan.
Seaton Valley North...	...	...	...	...	J. Dunn.
„ „ South...	...	...	...	...	J. S. Dack.

PUBLIC HEALTH LEGISLATION.

The following are the principal Acts, of administrative interest, which became law in 1938 :—

The Blind Persons Act, 1938, which entitles blind persons of 40 years of age (instead of 50 as heretofore) to Old Age Pensions, and which amends the law with respect to the provision of assistance in relation to such persons by local authorities.

The Population (Statistics) Act, 1938, makes further provision for obtaining information regarding the population of Great Britain.

The Food and Drugs Act, 1938, which consolidates, with amendments, certain enactments relating to food, drugs, markets, slaughter-houses and Knacker's yards.

The Housing (Rural Workers) Amendment Act, 1938, which amends the Housing (Rural Workers) Acts, 1926 and 1931.

The Mental Deficiency Act, 1938, which extends the time by one month, within which the Board of Control are required to determine whether orders made under Section 11 of the Mental Deficiency Act, 1913, are to be continued, and to validate orders purporting to have been continued under that Section.

The Milk (Extension and Amendment) Act, 1938. This Act extends certain temporary provisions of the Milk Acts, 1934, to 1937, to release Milk Marketing Boards and the Government of Northern Ireland from certain obligations under those Acts.

ORDERS, CIRCULARS, ETC.

The undermentioned are the principal Orders made, and Circulars and Memoranda issued during the year, which are of administrative interest to County Councils :—

The Public Health (Nursing Homes Registration Form) Regulations, 1938, prescribes the form to be used in connection with applications for registration of Nursing Homes.

The Milk (Special Designations) Amendment Order, 1938, amends the principal Order of 1936 in certain particulars.

The Milk and Dairies Amendment Order, 1938, revokes certain articles, which relate to the inspection of cattle, in the principal Order.

The Public Health (Aircraft) Regulations, 1938, outline the procedure to be followed in cases of infectious diseases, etc., in persons or contacts embarking on or disembarking from aircraft.

The Registration of Births, Still-births and Deaths, Regulations, 1938. These Regulations outline the procedure to be adopted in procuring information re births and deaths in connection with Section 3 of the Population (Statistics) Act, 1938.

Memorandum 211/M.C.W., outlines the conditions upon which future grants will be paid in respect of the training of midwives in consequence of the revised rules of the Central Midwives Board relating to training.

Memorandum—Factories Act, 1937. This Memorandum directs the attention of local authorities to their duties under this Act.

Memorandum on Small-pox. This Memorandum summarises the procedure to be adopted by a Medical Officer of Health on his becoming aware that Small-pox has appeared in his district.

Circular re Bacteriological Investigations with reference to Puerperal Sepsis. This circular indicates the value of bacteriological examination in respect of patients suffering from puerperal sepsis, and also persons in contact with the patient.

Circular 1670, calls attention to the requirements embodied in the revised instructions recently issued by the Board of Trade, relating to the provision of adequate and proper sanitary accommodation for crews on existing ships.

Circular 1674, directs that the provisions of the Public Health (Nursing Homes Registration Form) Regulations, 1938, should be brought to the notice of the Council of any district to whom a County Council has delegated its powers.

Circular 1677, relates to the Public Health (Aircraft) Regulations, 1938.

Circular 1681, outlines the duties imposed by the Blind Persons Act, 1938.

Circular 1684, is addressed to Water Boards and Water Companies and reminds Water undertakers of the serious responsibility which rests upon them in relation to the purity of public water supplies under their control.

Circular 1685, refers to the changes made in the Milk and Dairies Order and the Milk (Special Designations) Order, by virtue of the provisions contained in Section 19 (1) of the Agriculture Act, 1937, relating to the transfer of the functions of Veterinary Inspectors from local authorities to the Ministry of Agriculture and Fisheries.

Circular 1693, relates to Memo. 211/M.C.W. which outlines the conditions upon which future grants will be paid in respect of midwifery training.

Circular 1694, modifies the rules relating to the training of Health Visitors, in consequence of the revision of the Rules of the Central Midwives Board relating to the training of midwives.

Circular 1695, suggests measures which may be adopted in hospitals for ensuring non-interference with radio reception by electro-medical apparatus.

Circular 1702, relates to the final report of the Departmental Committee on the cost of hospitals which deals with maternity accommodation, accommodation for sick children, and accommodation for cases of chronic sickness.

Circular 1705, suggests, with a view to a still further reduction in maternal mortality, a panel of medical practitioners who would be available for emergency calls by midwives.

Circular 1716, explains the provisions of the Housing (Rural Workers) Act, 1938.

Circular 1724, deals with the provisions of the Memorandum on Small-pox referred to above.

Circular 1732, deals with the provision of hospital accommodation for air-raid casualties.

Circular 1755, explains the provisions of the Food and Drugs Act, 1938.

MINISTRY OF HEALTH INQUIRIES, 1938.

19th January, 1938, at the County Hall, Newcastle-on-Tyne : with regard to an application by the County Council for consent to purchase certain premises at Wallsend for a Tuberculosis Dispensary.

10th March, 1938, at the Town Hall, Berwick-on-Tweed : with regard to an application by the Rural District Council of Norham and Islandshires for consent to borrow £6,416 for works of Water-supply at Horncliffe, Norham and Shoreswood.

11th March, 1938, at the Town Hall, Berwick-on-Tweed : with regard to an application by the Rural District Council of Norham and Islandshires for consent to borrow £963 for works of sewerage at Norham.

1st November, 1938, at the Town Hall, Corbridge : with regard to an application by the Rural District Council, Hexham, for consent to borrow £17,365 for works of Sewerage and Sewage Disposal at Corbridge.

22nd November, 1938, at Dinnington Colliery : with regard to an application by the Rural District Council of Castle Ward for consent to borrow £3,000 for works of sewerage and sewage disposal at Mason, Dinnington and E. Brunton.

I am, my Lords, Ladies and Gentlemen,

Your obedient servant,

WILLIAM F. J. WHITLEY.

THE ADMINISTRATIVE COUNTY.

AREA.

The area of the County is 1,276,205 acres, divided as follows :—

Boroughs	...	...	...	...	...	18,346 acres.
Urban Districts	...	...	...	...	...	61,227 „
Rural Districts	...	...	...	...	...	1,196,632 „

POPULATION.

The *civil* population of Northumberland (exclusive of the county boroughs of Newcastle upon Tyne and Tynemouth) was estimated by the Registrar-General to be 405,900 at the middle of 1938.

The population at the 1931 census, as revised through the changes in boundary was 404,608.

RATEABLE VALUE.

Rateable value of Administrative County, as at April 1st, 1938, £2,144,807. Produce of a 1d. rate for year ended March 31st, 1939 (estimated), £8,417.

BOROUGHES, URBAN AND RURAL DISTRICTS, AND PORT HEALTH AUTHORITIES.

The County at the *end* of 1938 was divided for the purpose of sanitary administration into 26 districts, four of which were municipal boroughs, twelve urban districts, and ten rural districts. There are also the Blyth and Tyne Port Health Authorities. The Authorities for the Tweed and Coquet Ports are the Council of the Borough of Berwick-on-Tweed and the Amble Urban District Council respectively.

BOROUGHES.

Berwick-on-Tweed, Blyth, Morpeth and Wallsend.

The civil population of the boroughs was estimated to be 100,052 at the middle of 1938.

URBAN DISTRICTS.

Alnwick, Amble, Ashington, Bedlingtonshire, Gosforth, Hexham, Longbenton, Newbiggin-by-the-Sea, Newburn, Prudhoe, Seaton Valley, and Whitley & Monkseaton.

The civil population of the urban districts was estimated to be 211,148 at the middle of 1938.

RURAL DISTRICTS.

Alnwick, Belford, Bellingham, Castle Ward, Glendale, Haltwhistle, Hexham, Morpeth, Norham & Islandshires, and Rothbury.

The civil population of the rural districts was estimated to be 94,700 at the middle of 1938.

The area and population of each sanitary district in the administrative county will be found in a table opposite page 28 of this report.

SCHEME FOR WHOLE-TIME DISTRICT MEDICAL OFFICERS OF HEALTH.

The circumstances surrounding the reconstruction of Area No. 3 under the Scheme was explained in the Annual Report for the year 1937. During the year under review, the first whole-time appointment was made, Dr. W. Cunningham, Medical Officer of Health for the Urban District of Whitley and Monkseaton being appointed for the combined area of :—

Seaton Valley Urban District,
Whitley and Monkseaton Urban District and
Longbenton Urban District.

Dr. Cunningham took up his whole-time duties on August 1st, 1938.

As the result of the death of Dr. Wm. Hudson, Medical Officer of Health for the Bedlingtonshire Urban District, during the year, it became possible to make a whole-time appointment in the case of No. 2 area under the scheme; this, however, had not been done by the end of the year.

Area No. 2 comprises the under-mentioned districts :—

Morpeth Borough.
Ashington Urban District.
Bedlingtonshire Urban District.
Newbiggin-by-the-Sea Urban District.
Morpeth Rural District.

BIRTHS.

Live Births.—According to the statistics supplied by the Registrar-General the net births belonging to the administrative county numbered 6,091—3,169 males and 2,922 females (4,764 of the births occurred in urban districts and 1,327 in rural districts).

Of the 6,091 births above-mentioned 240 (3.9%) were illegitimate.

The birth rate for the county was 15.00 (15.16 in 1937 and 15.26 in 1936).

The following table shows the comparative rates :—

	Birth rate.	Increase since 1937.	Decrease since 1937.	Mean rate 1928-1937.
Administrative County ...	15.00	—	0.16	16.17
Urban districts ...	15.30	—	0.22	16.87
Rural districts ...	14.01	0.09	—	14.05
England and Wales ...	15.1	0.2	—	15.38

Still-births.—The net still-births stated by the Registrar-General to have been registered as belonging to the administrative county during the year 1938 numbered 259—151 males and 108 females (209 belonging to urban districts and 50 to rural districts). Thirteen, representing 5.0% of the 259 still-births, were illegitimate.

Comparative rates, per 1,000 of the population, and per 1,000 of the total births registered are given in the following table :—

	Number.	Rate per 1,000 population.	Rate per 1,000 total births registered.
Administrative County ...	259	0.63	40.7
Urban Districts ...	209	0.67	42.0
Rural Districts ...	50	0.52	36.3

Particulars of live births and still-births as regards each sanitary district in the administrative county are shown in a table opposite page 28 of this report.

DEATHS.

Net deaths.—According to information supplied by the Registrar-General the net deaths numbered 4,775—2,467 males and 2,308 females (3,593 in urban and 1,182 in rural districts).

The following table shows the comparative rates :—

	Death rate.	Increase since 1937.	Decrease since 1937.	Death rate adjusted by application of comparability factor.	Mean rate 1928-1937.
Administrative County	11·76	—	0·91	12·46	11·82
Urban districts ...	11·54	—	0·93	12·69	11·81
Rural districts ...	12·48	—	0·82	11·85	11·83
England and Wales ...	11·6	—	0·8	—	12·12

Details of the deaths and death rates in the several districts are given in the table opposite page 28 of this report.

The diseases causing the greatest mortality in the administrative county during 1938 were as follows :—

Disease.	No. of deaths.	Percentage of total deaths.
Heart Disease	1112	23·29
Cancer... ..	632	13·24
Other circulatory diseases ..	355	7·43
Cerebral Hæmorrhage etc. ..	307	6·43
Tuberculosis	228	4·77
Pneumonia (all forms)	212	4·44
Acute and Chronic Nephritis ...	158	3·31
Totals	3,004	62·91

The above-named seven diseases were responsible for more than half the deaths in the administrative county.

CANCER.

The following table indicates the proportion of deaths from Cancer to deaths from all causes during the five years 1933-37 inclusive. From this it would appear that in Northumberland there is a slight tendency towards an increase.

The regional radium centre in this area is at the Royal Victoria Infirmary, Newcastle-on-Tyne, which is a voluntary institution; the County Council has made arrangements for the treatment there of in-patients and also defrays the cost of travelling of both in-patients and out-patients attending the centre. The medical practitioners in the area have been informed of these facilities, but so far very little use has been made of them.

NORTHUMBERLAND.
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY DURING 1938.

	CAUSES OF DEATH.	Sex.	AGGREGATE OF URBAN DISTRICTS.													AGGREGATE OF RURAL DISTRICTS.													Total.
			All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—			
	ALL CAUSES	M. F.	1867 1726	176 135	24 21	35 27	51 30	46 54	84 77	100 90	166 140	331 301	466 413	388 438	600 582	45 37	8 2	5 4	5 8	23 15	18 17	31 20	28 44	106 86	150 150	181 199	2,467 2,308		
1	Typhoid and para-typhoid fevers	M. F.	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1	
2	Measles	M. F.	11 6	3 1	6 2	2 2	— 1	— —	— —	— —	— —	— —	— —	— —	2 2	2 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	11 8		
3	Scarlet fever	M. F.	2 4	— —	— —	1 3	1 —	— —	— —	— —	— —	— —	— —	— —	1 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	2 5		
4	Whooping cough...	M. F.	10 12	7 5	1 7	2 —	— —	— —	— —	— —	— —	— —	— —	— —	4 2	2 2	2 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	14 14		
5	Diphtheria	M. F.	22 17	2 —	— —	9 7	11 9	— 1	— —	— —	— —	— —	— —	— —	2 1	— —	— —	— —	2 1	— —	— —	— —	— —	— —	— —	— —	24 18		
6	Influenza	M. F.	15 17	1 —	— 1	— 1	— —	— 1	1 1	1 1	3 4	4 4	2 1	3 3	16 12	1 —	— —	— —	— —	1 —	— —	5 1	— 1	6 2	2 4	1 4	31 29		
7	Encephalitis lethargica ...	M. F.	— 5	— —	— —	— —	— —	— —	— 1	— 2	— —	— 1	— —	— 1	1 —	— —	— —	— —	— —	— —	— —	— —	1 —	— —	— —	— —	1 5		
8	Cerebro-spinal fever	M. F.	3 1	1 1	— —	1 —	— —	— —	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	3 1		
9	Tuberculosis of respiratory ...	M. F.	66 68	— —	— —	— 2	1 1	10 19	15 24	14 9	9 4	11 7	5 1	1 1	17 13	— 1	— —	— —	— —	3 3	4 6	3 —	2 2	4 1	1 —	— —	83 81		
10	Other tuberculous diseases ...	M. F.	22 27	1 4	1 —	— 2	7 4	5 7	1 6	4 1	2 1	1 1	— 1	— —	10 5	1 —	1 —	2 —	— 1	3 2	1 —	— —	1 —	1 1	— —	— —	32 32		
11	Syphilis	M. F.	10 5	— 1	— —	— —	— —	— —	— 1	3 —	3 —	2 3	2 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	10 5		
12	General paralysis of the insane, tabes dorsalis	M. F.	12 4	— —	— —	— —	— —	— —	— —	1 2	6 —	2 1	3 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	12 4		
13	Cancer, malignant disease ...	M. F.	239 234	— —	— —	— —	2 1	1 1	3 4	8 14	29 41	74 68	82 65	40 40	68 91	— —	— —	— —	— —	— —	— 1	4 4	17 10	24 27	22 26	307 325			
14	Diabetes	M. F.	16 44	— 1	— —	1 —	— —	1 —	1 1	— 1	2 3	3 12	5 16	3 10	8 15	— —	— —	— —	— —	1 —	— 1	— —	— —	— 1	5 6	2 7	24 59		
15	Cerebral hæmorrhage, etc. ...	M. F.	111 128	— —	— —	— —	— —	— —	— —	1 1	3 10	22 31	46 39	39 47	24 44	— —	— —	— —	— —	— —	— —	— —	1 8	4 6	9 17	10 13	135 172		
16	Heart disease	M. F.	427 389	— —	— —	— —	2 1	5 5	14 6	14 14	41 30	79 75	157 131	115 127	145 151	— —	— —	— —	— 1	1 1	2 1	4 4	5 7	28 23	52 44	53 70	572 540		
17	Aneurysm	M. F.	6 3	— —	— —	— —	— —	— 1	— —	— 1	1 1	2 —	2 —	1 —	1 —	— —	— —	— —	— —	1 —	— —	— —	— —	— —	— —	— —	7 3		
18	Other circulatory diseases ...	M. F.	127 136	1 —	— —	1 —	— —	— —	— —	2 1	1 3	22 17	42 52	58 63	51 41	— —	— —	— —	— —	— —	— —	— —	— 1	7 2	17 16	27 22	178 177		
19	Bronchitis... ..	M. F.	61 40	8 5	— —	— 2	1 —	1 —	— —	1 1	6 1	9 5	15 8	20 18	12 11	2 —	— —	— —	— —	— —	— —	— —	1 —	5 —	1 3	3 8	73 51		
20	Pneumonia (all forms)	M. F.	97 70	28 24	8 6	5 5	1 —	1 2	6 2	11 2	9 4	11 7	10 6	7 12	27 18	6 5	2 —	— 2	1 3	3 —	3 1	— 1	1 1	4 1	6 2	1 2	124 88		
21	Other respiratory diseases ...	M. F.	19 17	— 1	1 —	— —	— 1	1 —	1 1	2 3	4 2	1 2	7 1	2 6	6 4	— —	— —	— —	1 —	— —	— —	2 —	1 1	— 1	1 —	1 2	25 21		
22	Peptic ulcer	M. F.	17 4	— —	— —	— —	— —	— —	— —	2 1	5 —	2 3	6 —	2 —	12 4	— —	— —	— —	— —	1 —	— —	1 1	2 1	3 1	1 1	4 —	29 8		
23	Diarrhoea, 2 years and over ...	M. F.	6 9	— —	— —	— —	2 —	— —	1 —	— 1	— —	1 3	2 3	— 2	3 10	— —	— —	— —	— —	— 1	1 1	— —	— 1	— 2	1 2	1 3	9 19		
24	Diarrhoea, under 2 years	M. F.	13 11	12 10	1 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	3 2	2 2	1 —	— —	— —	— —	— —	— —	— —	— —	— —	— —	16 13		
25	Appendicitis	M. F.	12 7	— —	— —	1s —	4 —	1 3	1 —	— 1	2 —	— 1	3 1	— 1	1 2	— —	— —	— —	— —	— —	— —	— —	1 1	1 1	— —	— —	13 9		
26	Cirrhosis of liver	M. F.	4 5	— —	— —	— —	— —	— —	— —	1 —	2 2	1 3	— —	— —	4 3	— —	— —	— —	— —	— —	— —	— —	1 —	2 1	1 2	— —	8 8		
27	Other diseases of liver, etc. ...	M. F.	8 15	— —	— —	— —	1 —	— 1	— 1	— —	1 2	— 5	2 5	3 1	1 6	— —	— 1	— —	— —	— —	— —	— 1	— —	1 1	— 1	— 2	9 21		
28	Other digestive diseases	M. F.	43 33	5 —	2 1	— 1	1 2	— —	1 2	3 1	1 3	18 9	9 7	3 7	11 3	— —	— —	1 —	— —	— 1	— —	— —	1 —	1 —	5 1	1 1	54 36		
29	Acute and chronic nephritis ...	M. F.	46 62	— —	— —	— —	1 1	1 2	2 2	2 8	5 10																		

SPECIAL CAUSES INCLUDED IN No. 35 ABOVE.

Polio-encephalitis	M. F.	— 1	— —	— —	— —	— —	— —	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
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* Includes 1 additional death from Typhoid Fever.

PERCENTAGE OF DEATHS FROM CANCER TO THE TOTAL DEATHS REGISTERED IN NORTHUMBERLAND DURING THE YEARS 1933-1937 INCLUSIVE.

AGE PERIODS.	MALES.					FEMALES.					TOTALS.				
	Year.					Year.					Year.				
	1933	1934	1935	1936	1937	1933	1934	1935	1936	1937	1933	1934	1935	1936	1937
0-1 ...	—	—	—	—	—	—	—	0.5	—	0.5	—	—	0.2	—	0.2
1-2 ...	—	—	—	—	—	2.3	—	—	—	—	1.0	—	—	—	—
2-5 ...	—	1.9	2.2	2.7	—	—	1.4	3.0	—	—	—	1.6	2.5	1.5	—
5-15 ...	—	1.4	—	1.9	—	3.4	—	3.9	—	—	—	0.7	1.6	0.8	0.9
15-25 ...	1.7	3.1	1.0	2.5	0.8	1.0	3.7	—	1.6	3.6	1.5	3.4	0.5	2.1	2.0
25-35 ...	1.4	5.1	4.7	1.8	6.5	5.8	2.3	2.8	6.2	4.4	3.4	3.8	3.8	3.8	5.5
35-45 ...	6.3	9.6	9.0	7.5	4.5	19.0	14.9	20.2	15.6	18.4	13.0	12.3	13.7	11.2	10.8
45-55 ...	16.6	13.4	15.5	17.2	13.7	23.9	23.3	20.9	27.6	29.0	20.1	17.8	18.0	23.6	20.6
55-65 ...	18.0	20.6	20.9	19.1	17.7	23.7	21.7	19.0	20.9	22.8	20.7	21.1	20.0	19.9	20.1
65-75 ...	14.9	18.8	15.7	16.3	15.8	18.5	17.7	19.0	18.1	18.5	16.6	18.3	17.0	17.2	17.1
75 and upwards	6.7	9.0	8.3	11.4	10.9	11.4	9.4	9.1	8.6	10.8	9.1	9.2	8.7	9.9	10.9
All ages	9.6	11.9	11.0	12.1	11.2	14.3	12.7	12.8	13.4	14.8	11.8	12.2	11.8	12.7	12.9

INFANT MORTALITY.

	Number of deaths.	Death rate per 1000 births	Increase since 1937.	Decrease since 1937.	Mean rate 1928-1937
Administrative County ...	393	65	—	2	70
Urban districts ...	311	65	—	—	72
Rural districts ...	82	62	—	5	61
England and Wales ...	32,474	53	—	5	63

The subjoined tables indicate the rates among legitimate and illegitimate infants respectively :—

	Legitimate Infants.		Illegitimate Infants.	
	No. of deaths under 1 year.	Death rate per 1000 births.	No. of deaths under 1 year.	Death rate per 1000 births.
Administrative County ...	371	63	22	91
Urban districts ...	299	65	12	67
Rural districts ...	72	56	10	158

DEATHS UNDER 5 YEARS AND AT 65 YEARS AND UPWARDS.

The rates (per 1,000 population) were as follows :—

			Under 5 years.	65 years and upwards.
Administrative County ...	...	...	1.27	5.87
Urban districts ...	...	...	1.34	5.47
Rural districts ...	...	...	1.06	7.18

INFECTIOUS DISEASES.

Notifications of Infectious Diseases received during the year 1938 under Section 17 (3) of the Sanitary Officers (Outside London) Order, 1935.

SANITARY DISTRICTS.	Small-pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Pneumonia.	Puerperal Pyrexia.	Erysipelas.	TOTALS.
MUNICIPAL BOROUGHES.								
Berwick-on-Tweed ...	—	154	18	...	2	...	4	178
Blyth ...	—	128	36	2	43	7	32	248
Morpeth ...	—	15	6	...	10	2	8	41
Wallsend ...	—	272	133	11	121	2	29	568
Carried forward ...	—	569	193	13	176	11	73	1035

SANITARY DISTRICTS.				Small-pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Pneumonia.	Puerperal Pyrexia.	Erysipelas.	TOTALS.
<i>Brought forward ...</i>				—	569	193	13	176	11	73	1035
URBAN DISTRICTS.											
Alnwick...	—	9	1	...	1	...	...	11
Amble	—	5	—	...	5	...	...	10
Ashington	—	88	187	...	18	7	24	324
Bedlington	—	48	21	1	43	1	11	125
Gosforth	—	87	27	...	27	4	11	156
Hexham	—	32	5	...	8	1	6	52
Longbenton	—	76	112	2	17	3	7	217
Newbiggin-by-Sea	—	22	48	1	47	3	9	130
Newburn	—	48	56	...	50	3	6	163
Prudhoe	—	50	11	...	37	...	7	105
Seaton Valley	—	140	72	...	12	3	12	239
Whitley & Monkseaton	—	104	48	...	26	2	24	204
RURAL DISTRICTS.											
Alnwick...	—	30	6	...	1	...	3	40
Belford	—	13	1	...	10	1	5	30
Bellingham	—	9	...	...	7	1	3	20
Castle Ward	—	43	35	...	8	2	4	92
Glendale	—	15	...	...	10	2	2	29
Haltwhistle	—	3	1	...	6	...	1	11
Hexham	—	53	13	1	26	3	4	100
Morpeth	—	26	11	1	27	...	7	72
Norham & Islandshire	—	27	...	1	3	...	...	31
Rothbury	—	22	7	...	13	...	9	51
				—	1,519	855	20	578	47	228	3,247

The attack rate per 1,000 population for the administrative county was 7.99, for boroughs and urban districts 8.90, and for rural districts 5.02.

The following are the attack rates, per 1,000 population, of the under-mentioned infectious diseases, in each sanitary district in the administrative county :—

Sanitary Districts.				Small-pox	Scarlet Fever.	Diphtheria.	Enteric Fever.*	Puerperal Pyrexia	Erysipelas.
<i>Municipal Boroughs.</i>									
Berwick	—	12.76	1.49	...	...	0.33
Blyth	—	3.71	1.04	0.05	0.20	0.92
Morpeth	—	1.57	0.62	...	0.20	0.83
Wallsend	—	6.20	3.02	0.25	0.04	0.65
<i>Urban Districts.</i>									
Alnwick	—	1.31	0.14	...	...	...
Amble	—	1.16	...	...	...	...
Ashington	—	2.94	6.26	...	0.23	0.80

* Including Typhoid and Paratyphoid.

Sanitary Districts.				Small pox.	Scarlet Fever.	Diph- theria.	Enteric Fever.*	Puer- peral Pyrexia	Erysi- pelas.
<i>Urban Districts—Contd.</i>									
Bedlingtonshire	—	1.75	0.76	0.03	0.03	0.40
Gosforth	—	4.29	1.33	—	0.19	0.54
Hexham	—	3.53	0.55	—	0.11	0.66
Longbenton	—	3.53	5.20	0.09	0.13	0.32
Newbiggin	—	2.46	5.38	0.11	0.33	1.01
Newburn	—	2.47	2.89	—	0.15	0.31
Prudhoe	—	5.69	1.25	—	—	0.79
Seaton Valley	—	5.09	2.61	—	0.10	0.43
Whitley & Monkseaton	—	3.79	1.75	—	0.07	0.87
<i>Rural Districts.</i>									
Alnwick	—	2.47	0.49	—	—	0.24
Belford	—	2.73	0.21	—	0.21	1.04
Bellingham	—	1.85	—	—	0.20	0.62
Castle Ward	—	3.39	2.76	—	0.15	0.31
Glendale	—	2.03	—	—	0.27	0.27
Haltwhistle	—	0.38	0.12	—	—	0.12
Hexham	—	2.69	0.66	0.05	0.15	0.20
Morpeth	—	1.69	0.71	0.06	—	0.45
Norham & Islandshires	—	5.92	—	0.22	—	—
Rothbury	—	3.95	1.26	—	—	1.62

* Including Typhoid and Paratyphoid.

It will be observed that the highest attack rates were as follows :—

Scarlet Fever.—Berwick Borough, 12.76 ; Wallsend Borough, 6.20 ; Norham and Islandshires R.D., 5.92.

Diphtheria.—Ashington U.D., 6.26 ; Newbiggin-by-the-Sea U.D., 5.38 ; Longbenton U.D., 5.20.

Enteric Fever.—Wallsend Borough, 0.25 ; Norham and Islandshires R.D., 0.22 ; Newbiggin-by-the-Sea U.D., 0.11.

Puerperal Pyrexia.—Newbiggin-by-the-Sea U.D., 0.33 ; Glendale R.D., 0.27 ; Ashington U.D., 0.23.

Erysipelas.—Rothbury R.D., 1.62 ; Belford R.D., 1.04 ; Newbiggin-by-the-Sea U.D., 1.01.

ZYMOTIC DISEASES.

The Zymotic diseases which are generally notifiable are Small pox, Scarletina, Diphtheria, Fevers (Typhus, Typhoid, Paratyphoid and Continued & Relapsing). The seven principal Zymotic diseases upon which the Zymotic death rate is calculated, are the four just mentioned, and in addition, Whooping Cough, Measles and Diarrhoea & Enteritis (under two years).

One hundred and twenty-seven deaths were caused by the seven principal Zymotic diseases, being a decrease of 21 compared with the number registered in 1937. Of these 110, took place in the urban and 17 in the rural districts.

The Zymotic diseases which caused the greatest mortality were :—

Diseases.	Number of deaths.		
	1938.	1937.	1936.
Diphtheria... ..	42	21	38
Diarrhoea and Enteritis (under 2 years)	29	34	48
Whooping Cough... ..	28	22	9

As Diarrhoea & Enteritis, Measles and Whooping Cough are not generally notifiable, no information can be given as to the number of cases which occurred.

The comparative rates for Zymotic diseases are set out in the following table :—

Diseases.	Death Rate.	Increase since 1937.	Decrease since 1937.
Administrative County ...	0·31	0·05	—
Urban districts	0·35	0·08	—
Rural districts	0·18	—	0·05
England and Wales	0·23	—	—

Table showing death rates per 1,000 living, from each of the seven principal Zymotic diseases for the seven years ended December 31st, 1938.

Diseases.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
Small-pox	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Scarlatina	0·014	0·046	0·075	0·037	0·005	0·015	0·017
Diphtheria	0·022	0·015	0·073	0·108	0·093	0·051	0·103
Typhoid & Paratyphoid	0·007	0·012	0·004	Nil.	0·005	0·015	0·005
Measles	0·017	0·053	0·133	0·042	0·059	0·041	0·046
Whooping Cough	0·095	0·029	0·068	0·056	0·022	0·054	0·069
Diarrhoea & Enteritis (under 2 years)	0·100	0·154	0·084	0·081	0·118	0·083	0·071

Small-pox.—No cases were notified.

Typhus, Cholera, Plague, Anthrax (in human subjects).—No cases were reported.

Cerebro-spinal Meningitis.—Eight cases were notified; 4 deaths were reported.

Encephalitis Lethargica.—One case was notified; six deaths were reported.

Poliomyelitis.—No case was notified and no death was reported.

Polio-encephalitis.—No case was notified, one death was reported.

Chicken-pox was reported from 8 Sanitary districts.

Dysentery.—Twenty-three cases were reported from 7 Sanitary districts.

Measles.—Cases were reported from 3 Sanitary districts.

Malaria.—No case was reported.

Undulant Fever.—No case was reported.

Whooping Cough.—A few cases were reported from two districts.

SCARLET FEVER.

The notifications numbered 1,519 (1,278 from urban and 241 from rural districts). The mortality from this disease was 7 (6 occurring in urban and 1 in rural districts). In 1937 6 deaths were reported, and in 1936, 2.

		Death rate per 1000 population.	Increase since 1937.	Decrease since 1937.	Attack rate per 1000 living.
Administrative County	...	0·017	0·002	—	3·74
Urban districts	...	0·019	0·003	—	4·10
Rural districts	...	0·010	—	—	2·54

The district in which the greatest number of cases occurred was Wallsend Borough (272).

TYPHOID AND PARATYPHOID FEVERS.

Twenty cases (17 from urban and 3 from rural districts) were notified. Two deaths occurred. In 1937 there were 6 deaths from this disease, in 1936, 2.

		Death rate per 1000 population.	Increase since 1937.	Decrease since 1937.	Attack rate per 1000 living.
Administrative County	...	0·005	—	0·010	0·05
Urban districts	...	0·006	—	0·010	0·05
Rural districts	...	—	—	0·010	0·03

The district in which the greatest number of cases occurred was Wallsend Borough, 11.

DIPHTHERIA AND MEMBRANOUS CROUP.

The notifications numbered 855 (781 from urban and 74 from rural districts). The diseases (one or both) were notified from all districts except the urban district of Amble and the rural districts of Bellingham and Glendale.

Forty-two deaths occurred (39 in urban and 3 in rural districts); 21 deaths were reported in 1937 and 38 in 1936.

		Death rate per 1000 population.	Increase since 1937.	Decrease since 1937.	Attack rate per 1000 living.
Administrative County	...	0·103	0·052	—	2·11
Urban districts	...	0·125	0·071	—	2·51
Rural districts	...	0·031	—	0·011	0·78

MEASLES.

Nineteen deaths occurred (all except two in urban districts); 17 deaths were reported in 1937 and 24 in 1936.

		Death rate per 1,000 population.	Increase since 1937.	Decrease since 1937.
Administrative County	...	0·046	0·005	—
Urban districts	...	0·054	0·006	—
Rural districts	...	0·021	—	—

WHOOPING COUGH.

The deaths numbered 28 (22 in urban districts and 6 in rural districts); 22 deaths were reported in 1937 and 9 in 1936.

		Death rate per 1,000 population.	Increase since 1937.	Decrease since 1937.
Administrative County	...	0·069	0·015	—
Urban districts	...	0·070	0·022	—
Rural districts	...	0·063	—	0·010

PUERPERAL SEPSIS.

This disease caused 4 deaths (all in urban districts), compared with 6 in 1937 and 10 in 1936.

		Death rate per 1,000 total births.	Increase since 1937.	Decrease since 1937.
Administrative County	...	0·63	—	0·30
Urban districts	...	0·80	—	0·18
Rural districts	...	—	0·73	—

The distribution of the deaths was as follows : Blyth Borough, 1; Morpeth Borough, 1; Longbenton Urban District, 1; Newbiggin-by-the-Sea Urban District, 1.

DIARRHOEA AND ENTERITIS.

At all ages.

The number of deaths at all ages was 57 (39 in urban and 18 in rural districts). In 1937 53 deaths occurred, and in 1936, 61.

	Death rate per 1,000 population.	Increase since 1937.	Decrease since 1937.
Administrative County	0·140	0·010	—
Urban districts	0·125	—	—
Rural districts	0·190	0·043	—

Under 2 years.

The deaths from this cause, under two years of age, numbered 29 (34 in 1937 and 48 in 1936); 24 occurred in urban and 5 in rural districts.

	Death Rate per 1,000 births.	Increase since 1937.	Decrease since 1937.
Administrative County	4·76	—	0·76
Urban districts	5·03	—	0·55
Rural districts	3·76	—	1·54

RESPIRATORY DISEASES.

Respiratory diseases (exclusive of Respiratory Tuberculosis) caused 382 deaths in the administrative county during the year; 304 occurred in urban and 78 in rural districts. 484 deaths were reported in 1937 and 455 during 1936. The following tables shows the comparative rates :—

	Death Rate per 1,000 population.	Increase since 1937.	Decrease since 1937.
Administrative County	0·94	—	0·25
Urban districts	0·97	—	0·30
Rural districts	0·82	—	0·10

INFLUENZA.

Sixty deaths were recorded (32 in urban and 28 in rural districts), as directly attributable to this disease during the year. The deaths during 1937 numbered 196, and during 1936, 47. The following table indicate the comparative rates :—

	Death Rate per 1,000 population.	Increase since 1936.	Decrease since 1936.
Administrative County	0·14	—	0·34
Urban districts	0·10	—	0·35
Rural districts	0·29	—	0·29

TABLE OF VITAL AND MORTALITY STATISTICS, &c., 1938.

Vital and Mortality Statistics.

The following table shows the principal vital and mortality rates for the years 1892-1938 (inclusive).

Year.			Birth rate per 1,000 living.	General death rate per 1,000 living.	Infant mortality rate per 1,000 births.	Zymotic death rate per 1,000 living.	Death rate from Respiratory Tuberculosis per 1,000 living.
1892	...	...	33.25	18.41	130.00	1.42	1.67
1893	...	...	33.22	18.50	160.00	2.35	1.67
1894	...	...	31.76	16.12	131.73	1.51	1.56
1895	...	...	32.59	18.72	156.28	2.29	1.62
1896	...	...	31.75	15.87	136.74	1.46	1.43
1897	...	...	31.57	16.73	150.66	1.69	1.50
1898	...	...	30.88	17.44	169.80	1.99	1.32
1899	...	...	31.46	17.71	173.88	2.29	1.27
1900	...	...	31.24	17.53	160.31	1.73	1.38
1901	...	...	33.22	18.72	183.57	2.80	1.25
1902	...	...	32.76	16.63	126.90	1.40	1.25
1903	...	...	32.58	16.81	145.43	1.58	1.19
1904	...	...	29.42	17.12	168.69	1.99	1.17
1905	...	...	30.41	15.01	133.57	1.26	1.02
1906	...	...	29.09	14.52	136.28	1.51	1.04
1907	...	...	28.25	13.51	112.93	1.03	1.00
1908	...	...	29.46	14.82	146.41	1.28	0.95
1909	...	...	28.43	13.39	106.99	1.03	1.01
1910	...	...	26.91	12.99	114.73	1.01	0.93
1911	...	...	27.48	13.96	136.79	1.94	0.98
1912	...	...	27.05	12.98	93.80	1.02	0.86
1913	...	...	26.43	13.61	111.39	1.28	0.91
1914	...	...	26.61	13.31	113.78	1.33	0.91
1915	...	...	24.42	15.82	122.00	2.04	1.03
1916	...	...	21.91	13.75	101.00	0.84	1.10
1917	...	...	20.39	13.60	101.00	0.97	1.06
1918	...	...	21.54	17.26	101.00	1.07	1.22
1919	...	...	22.14	14.11	102.00	0.92	0.97
1920	...	...	28.30	12.89	90.00	0.76	0.92
1921	...	...	25.50	12.42	95.00	1.01	0.87
1922	...	...	22.54	12.72	87.00	0.41	0.88
1923	...	...	22.56	11.33	76.00	0.74	0.85
1924	...	...	22.18	12.06	83.00	0.40	0.82
1925	...	...	20.88	11.63	82.00	0.67	0.78
1926	...	...	20.02	11.37	77.00	0.53	0.73
1927	...	...	17.90	11.53	77.00	0.27	0.81
1928	...	...	18.37	11.39	67.00	0.28	0.68
1929	...	...	16.79	12.22	81.00	0.65	0.74
1930	...	...	17.13	11.02	62.00	0.23	0.78
1931	...	...	16.66	12.24	77.00	0.41	0.75
1932	...	...	15.94	11.33	67.00	0.25	0.68
1933	...	...	15.42	11.93	71.00	0.31	0.65
1934	...	...	15.48	11.78	69.00	0.43	0.60
1935	...	...	15.60	11.67	71.00	0.32	0.53
1936	...	...	15.26	12.02	70.00	0.30	0.55
1937	...	...	15.16	12.67	66.00	0.26	0.54
1938	...	...	15.00	11.76	64.00	0.31	0.40

TUBERCULOSIS.

Table 1.

Deaths and death rates.

	Respiratory Tuberculosis.				Other Tuberculous diseases.				Tuberculosis (all forms).			
	Deaths.	Death rates per 100,000 living.	Increase in rates since 1937.	Decrease in rates since 1937.	Deaths.	Death rates per 100,000 living.	Increase in rates since 1937.	Decrease in rates since 1937.	Deaths.	Death rates per 100,000 living.	Increase in rates since 1937.	Decrease in rates since 1937.
Administrative County	164	40	...	14	64	16	...	3	228	56	...	17
Urban districts ...	134	43	...	16	49	16	...	2	183	59	...	18
Rural districts ...	30	32	...	6	15	16	...	7	45	48	...	13
England and Wales ...	...	53	...	5	...	10	...	1	...	63	...	6

Table 1 shows the number of deaths and the death rates per 100,000 living from all forms of Tuberculosis. It will be observed that in Respiratory Tuberculosis there is a decrease of 14 in the Administrative County as a whole, 16 in the urban districts and 6 per 100,000 living persons in the rural districts.

In other forms of Tuberculosis the rate has decreased by 3 in the Administrative County, 2 in the urban districts and 7 per 100,000 of population in the rural districts.

As indicated above, the death rate from all forms of Tuberculosis in the Administrative County during 1938 was 56, being a decrease of 17 per 100,000 of population on the rate of last year. Of the 228 deaths, 183 occurred in boroughs and urban districts (population 311,200) equivalent to a death rate of 59 per 100,000 living persons, and 45 in rural districts (population 94,700) corresponding with a death rate of 48 per 100,000 living.

Table 2.

Deaths and death rates, 1900—1938.

Administrative County of Northumberland.

Year.	Respiratory Tuberculosis.		Other Tuberculous Diseases.		Tuberculosis (all forms).		Total Deaths from all causes.	% of Deaths from Tuberculosis.
	No. of Deaths.	Death rate per 100,000 living.	No. of Deaths.	Death rate per 100,000 living.	No. of Deaths.	Death rate per 100,000 living.		
*1900	537	138	244	62	781	200	6,822	11·4
*1901	495	125	280	71	775	196	7,261	10·6
*1902	498	125	240	60	738	185	6,605	11·1
*1903	485	119	323	79	808	198	6,826	11·8
*1904	490	117	317	76	807	193	7,131	11·3
1905	344	102	239	71	583	173	5,016	11·6
1906	362	104	208	60	570	164	5,026	11·3
1907	355	100	197	55	552	155	4,790	11·5
1908	344	95	220	60	564	155	5,377	10·5
1909	377	101	207	55	584	156	4,994	11·6
1910	355	93	225	60	580	153	4,917	11·7
1911	366	98	200	54	566	152	5,159	10·9
1912	328	86	193	50	521	136	4,861	10·7
1913	353	91	189	48	542	139	5,175	10·4
†1914	360	91	180	46	540	137	5,125	10·5
†1915	376	103	197	54	573	157	5,786	9·9
†1916	394	110	187	52	581	162	4,915	11·8
†1917	378	106	194	54	572	160	4,851	11·7
†1918	434	122	164	46	598	168	6,129	9·7
1919	367	97	136	36	503	133	5,335	9·4
1920	363	92	144	37	507	129	5,072	9·9
1921	347	87	151	38	498	125	4,944	10·1
1922	355	88	127	31	482	119	5,113	9·4
1923	345	85	122	30	467	115	4,599	10·1
1924	337	82	126	31	463	113	4,951	9·3
1925	324	78	123	30	447	108	4,807	9·3
1926	303	73	120	29	423	102	4,735	8·9
1927	337	81	90	22	427	103	4,812	8·9
1928	277	68	107	26	384	94	4,642	8·3
1929	301	74	108	26	409	100	5,009	8·2
1930	321	78	89	22	410	100	4,516	9·1
1931	309	75	100	25	409	100	4,993	8·2
1932	279	68	93	23	372	91	4,648	8·0
1933	268	65	81	20	349	85	4,893	7·1
1934	249	60	85	21	334	81	4,856	6·9
1935	218	53	77	19	295	72	4,742	6·2
1936	224	55	66	16	290	71	4,886	5·9
1937	219	54	78	19	297	73	5,143	5·8
1938	164	40	64	16	228	56	4,775	4·8
Mean 1928-1937.	266	65	88	22	355	87	4,833	7·3

NOTES.—*Prior to 1905 Tynemouth U.D., Benwell and Walker were in County area.

†1914-1918 were "war" years.

‡1918 was the year of two severe epidemics of influenza.

Table 2 shows the deaths and death rates from 1900 to 1938 in the Administrative County from respiratory tuberculosis, other tuberculous diseases, and all forms, together with the total number of deaths from

all causes and the percentage of deaths due to tuberculous diseases. It will be noted that the death rate from all forms of tuberculosis is 56 per 100,000 living persons, while in 1900 it was 200. The percentage of deaths from tuberculosis in 1900 was 11.4 against 4.8 in 1938. The total number of deaths from all causes in 1900 was 6,822, while in 1938 it was 4,775.

During the five years 1933-1937 the mean mortality rate from all forms of tuberculous diseases in the Administrative County was 76; respiratory tuberculosis 57; and other tuberculous diseases 19 per 100,000 living. In the preceding quinquennial period (1928-1932) the mean rates were: from tuberculosis (all forms) 97; respiratory 73, and other tuberculous diseases 24 per 100,000 persons living.

The following table shows notifications and mortality at specified age periods during the year 1938 :—

Table 3.

Age Periods.	*New Cases.				Deaths.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
0— ...	—	—	3	3	—	1	2	4
1— ...	6	9	13	11	—	2	4	2
5— ...	22	22	38	27	1	1	7	5
15— ...	54	54	23	26	13	22	8	9
25— ...	34	36	9	10	19	30	2	6
35— ...	28	23	4	3	17	9	4	1
45— ...	17	11	5	7	11	6	3	1
55— ...	17	5	4	2	15	8	2	2
65 and upwards	6	3	—	2	7	2	11	2
	184	163	99	91	83	81	32	32

* Includes new cases coming to the knowledge of the County Medical Officer other than by formal notification under the Public Health (Tuberculosis) Regulations, 1930.

Thirty-six cases (15 pulmonary and 21 non-pulmonary) were not notified prior to death. Of this number 12 died in institutions, etc., outside the Administrative County. Last year 32 cases were unnotified prior to death.

ADMINISTRATION.

For convenience, the following data is given categorically in order to meet the requirements of the Ministry of Health :—

Public Health (Prevention of Tuberculosis) Regulations, 1925.—Following upon an application by the County Council, authority for enforcing these Regulations, within the area of the administrative county, was given to the County Council through the medium of the County of Buckingham (Prevention of Tuberculosis) Order, 1926. It was not found necessary to take any action under the Regulations during the year.

Public Health Act, 1925, Section 62.—No action was found to be necessary during the year.

As already indicated, the mean death rate from Respiratory Tuberculosis in the administrative County during the previous five years (1933-1937) was 57 per 100,000; this rate is greater than that recorded from all the deaths arising from the seven principal Zymotic Diseases, which showed a mean rate of 32 per 100,000 during the same period.

TABLE 4.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

SUMMARY OF NOTIFICATIONS DURING THE PERIOD FROM THE 1ST JANUARY, 1938, TO THE 31ST DECEMBER, 1938, IN THE AREA OF THE COUNTY OF NORTHUMBERLAND.

Formal Notifications.												
Age-periods.	Number of Primary Notifications of new cases of Tuberculosis.											
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards.	Total Notifications.
	Total (all ages).											Total Notifications.
Pulmonary (Males) ...	—	6	16	6	18	32	26	16	16	5	177	201
" (Females) ...	—	8	6	16	33	34	22	10	4	3	155	172
Non-pulmonary (Males) ...	2	9	19	18	8	8	4	5	1	—	88	101
" (Females) ...	2	10	12	14	8	9	2	6	2	1	81	86
											501	560

NOTIFICATION REGISTERS.

	Pulmonary.			Non-Pulmonary.			Total Cases.
	Males.		Total.	Males.		Total.	
	Females.			Females.			
Number of cases of Tuberculosis remaining at the 31st December, 1938, on the Registers of Notifications kept by District Medical Officers of Health in the County ...	1,488	1,359	2,847	669	609	1,278	4,125
Number of cases removed from the Registers during the year by reason <i>inter alia</i> of :—							
1. Withdrawal of notification ...	3	1	4	4	1	5	9
2. Recovery from disease ...	49	57	106	30	21	51	157
3. Death (all causes) ...	67	64	131	21	14	35	166
4. Otherwise ...	7	11	18	2	3	5	23

TABLE 5.

INCIDENCE OF TUBERCULOSIS IN THE ADMINISTRATIVE COUNTY ACCORDING
TO DISTRICTS, 1938.

SANITARY DISTRICTS.	"Live" cases on Registers at com- mencement of year.			Number of Primary Notifications during year.			Deaths Registered during year.			"Live" cases on Registers at end of year.		
	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total	Respir- atory.	Other forms.	Total
<i>Municipal Boroughs.</i>												
Berwick-on-Tweed ...	74	60	134	11	1	12	2	...	2	87	61	148
Blyth ...	214	60	274	29	8	37	20	5	25	218	56	274
Morpeth ...	99	22	121	8	4	12	1	1	2	101	24	125
Wallsend...	213	80	293	67	30	97	39	13	52	223	88	311
<i>Urban Districts.</i>												
Alnwick ...	87	20	107	7	1	8	5	...	5	90	19	109
Amble ...	20	12	32	3	1	4	2	1	3	21	13	34
Ashington ...	180	99	279	19	5	24	10	1	11	179	96	275
Bedlingtonshire...	233	101	334	22	12	34	12	6	18	227	105	332
Gosforth...	48	18	66	11	3	14	6	8	14	58	25	83
Hexham ...	135	36	171	10	5	15	2	1	3	142	41	183
Longbenton ...	118	34	152	10	8	18	6	...	6	113	39	152
Newbiggin-by-the-Sea ...	85	45	130	9	19	28	2	...	2	81	45	126
Newburn...	207	129	336	15	13	28	8	5	13	216	138	354
Prudhoe ...	40	25	65	4	7	11	2	1	3	46	28	74
Seaton Valley ...	95	32	127	24	10	34	9	2	11	108	43	151
Whitley & Monkseaton...	201	76	277	27	6	33	8	5	13	222	85	307
<i>Rural Districts.</i>												
Alnwick ...	88	47	135	7	2	9	8	3	11	85	49	134
Belford ...	8	13	21	3	2	5	...	...	...	9	16	25
Bellingham ...	37	7	44	5	1	6	2	1	3	42	7	49
Castle Ward ...	132	67	199	5	2	7	3	2	5	130	69	199
Glendale ...	32	17	49	2	1	3	...	...	...	40	18	58
Haltwhistle ...	26	2	28	...	...	...	3	1	4	26	3	29
Hexham ...	179	59	238	18	7	25	7	4	11	194	63	257
Morpeth ...	146	106	252	6	18	24	5	3	8	147	119	266
Norham & Islandshires...	25	23	48	1	1	2	1	1	2	24	24	48
Rothbury ...	11	2	13	9	2	11	1	...	1	18	4	22
TOTALS ...	2,733	1,192	3,925	332	169	501	164	64	228	2,847	1,278	4,125

[illegible]

TREATMENT OF TUBERCULOSIS.

The following consolidated return shows the work of all the dispensaries during the year 1938; succeeding tables give an outline of the work of individual dispensaries. It will be observed that of 1,173 new cases (including contacts) examined, 302 were definitely tuberculous; 206 cases were written off the dispensaries' registers as recovered, and 114 died. At the end of the year 1,282 definite cases of tuberculosis were on the dispensaries' registers.

TUBERCULOSIS SCHEME
OF THE NORTHUMBERLAND COUNTY COUNCIL.

RETURN SHOWING THE WORK OF THE DISPENSARIES DURING THE YEAR 1938.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY				TOTAL.				GRAND TOTAL.	
	Adults.		Children.		Adults.		Children.		Adults.		Children.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—NEW CASES examined during the year (excluding contacts):														
(a) Definitely tuberculous ...	103	72	20	14	12	12	26	15	115	84	46	29	} 840	
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	21	22	8	5
(c) Non-tuberculous ...	...	...	...	...	...	...	...	...	164	165	92	89
B.—CONTACTS examined during the year :—														
(a) Definitely tuberculous ...	6	5	5	6	...	1	1	4	6	6	6	10	} 333	
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	4	4	4	2
(c) Non-tuberculous ...	...	...	...	...	...	...	...	...	40	80	80	91
C.—CASES written off the Dispensaries' Registers as :—														
(a) Recovered ...	55	43	31	26	3	5	22	21	58	48	53	47	} 1,022	
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensaries' Registers as tuberculous)...	...	...	...	...	...	...	...	...	206	250	177	183
D.—NUMBER OF CASES on Dispensaries' Registers on December 31st :—														
(a) Definitely tuberculous ...	387	308	149	154	30	33	114	107	417	341	263	261	} 1,328	
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	12	19	11	4

1. Number of cases on Dispensaries' Registers on January 1st ... 1,371
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ... 95
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" 175
4. Cases written off during the year as Dead (all causes) ... 114
5. Number of attendances at the Dispensaries (including Contacts) 3,899
6. Number of Insured Persons under Domiciliary Treatment on the 31st December ... 309
7. Number of consultations with medical practitioners :—
 - (a) Personal ... 169
 - (b) Other ... 2,397

(I.) PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1938 of all patients remaining on the Dispensaries' Registers; and (b) the reasons for the removal of all cases written off the Registers. The Table is arranged according to the years in which the patients were first entered on the Dispensaries' Registers as definite cases of pulmonary tuberculosis, and their classification at that time.

[illegible]

(II.) NON-PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1938 of all patients remaining on the Dispensaries' Registers; and (b) the reasons for the removal of all cases written off the Registers.

[illegible]

8. Number of visits by Tuberculosis Officers to homes (including personal consultations)	421
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	10,474
10. Number of :—	
(a) Specimens of sputum, etc., examined... ..	637
(b) X-ray examinations made in connection with Dispensary work	1,076
11. Number of "Recovered" cases restored to Dispensaries' Registers, and included in A (a) and A (b) above... ..	6
12. Number of "T.B. plus" cases on Dispensaries' Registers on December 31st	458

Shelters for Domiciliary Treatment of Tuberculosis.—Portable sleeping shelters are provided and maintained by the County Council for the use of patients who are residing at home.

These shelters are distributed on the recommendation of the Tuberculosis Officer ; 52 are available, most of which are in regular use.

<i>Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment)</i>	5
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RETURN SHOWING THE WORK OF THE ASHINGTON DISPENSARY DURING THE YEAR 1938.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous	86	27	113
(b) Diagnosis not completed	—	—	6
(c) Non-tuberculous... ..	—	—	242
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	5	4	9
(b) Diagnosis not completed	—	—	2
(c) Non-tuberculous... ..	—	—	66
C.—CASES written off the Dispensary Register as :—			
(a) Recovered	59	17	76
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	308
D.—NUMBER OF CASES on Dispensary Register on December 31st :—			
(a) Definitely Tuberculous	337	114	451
(b) Diagnosis not completed	—	—	8

1. Number of cases on Dispensary Register on January 1st... ..	484
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	7
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	40
4. Cases written off during the year as Dead (all causes)	46

5. Number of attendances at the Dispensary (including contacts)...	1,253
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above... ..	2
7. Number of "T.B. plus" cases on Dispensary Register on December 31st	128

RETURN SHOWING THE WORK OF THE BLYTH DISPENSARY
DURING THE YEAR 1938.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts):—			
(a) Definitely tuberculous	38	13	51
(b) Diagnosis not completed	—	—	16
(c) Non-tuberculous... ..	—	—	50
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	3	—	3
(b) Diagnosis not completed	—	—	5
(c) Non-tuberculous... ..	—	—	57
C.—CASES written off the Dispensary Register as:—			
(a) Recovered	16	10	26
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	112
D.—NUMBER OF CASES on Dispensary Register on December 31st:—			
(a) Definitely tuberculous	152	33	185
(b) Diagnosis not completed	—	—	15

1. Number of cases on Dispensary Register on January 1st...	190
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	12
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	24
4. Cases written off during the year as Dead (all causes)	22
5. Number of attendances at the Dispensary (including contacts)...	632
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above... ..	2
7. Number of "T.B. plus" cases on Dispensary Register on December 31st	75

RETURN SHOWING THE WORK OF THE HEXHAM DISPENSARY
DURING THE YEAR 1938.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous	18	10	28
(b) Diagnosis not completed	—	—	1
(c) Non-tuberculous... ..	—	—	71
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	—	—	—
(b) Diagnosis not completed	—	—	2
(c) Non-tuberculous... ..	—	—	17
C.—CASES written off the Dispensary Register as :—			
(a) Recovered	6	1	7
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	92
D.—NUMBER OF CASES on Dispensary Register on December 31st :—			
(a) Definitely tuberculous	123	29	152
(b) Diagnosis not completed	—	—	2

1. Number of cases on Dispensary Register on January 1st... ..	159
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	19
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	38
4. Cases written off during the year as Dead (all causes)	6
5. Number of attendances at the Dispensary (including contacts)... ..	360
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above... ..	—
7. Number of "T.B. plus" cases on Dispensary Register on December 31st	63

RETURN SHOWING THE WORK OF THE NEWBURN DISPENSARY
DURING THE YEAR 1938.

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous	13	4	17
(b) Diagnosis not completed	—	—	6
(c) Non-tuberculous... ..	—	—	26
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous	1	1	2
(b) Diagnosis not completed	—	—	—
(c) Non-tuberculous... ..	—	—	33

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
C.—CASES written off the Dispensary Register as :—			
(a) Recovered	36	15	51
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	—	—	59
D.—NUMBER OF CASES on Dispensary Register on December 31st :—			
(a) Definitely tuberculous ...	66	33	99
(b) Diagnosis not completed ...	—	—	6

1. Number of cases on Dispensary Register on January 1st...	119
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...	21
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	3
4. Cases written off during the year as Dead (all causes) ...	6
5. Number of attendances at the Dispensary (including contacts)...	315
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above...	—
7. Number of "T.B. plus" cases on Dispensary Register on December 31st ...	32

**RETURN SHOWING THE WORK OF THE WALLSEND DISPENSARY
DURING THE YEAR 1938.**

DIAGNOSIS.	Pulmonary.	Non-Pulmonary.	TOTAL.
A.—NEW CASES examined during the year (excluding contacts) :—			
(a) Definitely tuberculous ...	54	11	65
(b) Diagnosis not completed ...	—	—	27
(c) Non-tuberculous... ..	—	—	121
B.—CONTACTS examined during the year:			
(a) Definitely tuberculous ...	13	1	14
(b) Diagnosis not completed ...	—	—	5
(c) Non-tuberculous... ..	—	—	118
C.—CASES written off the Dispensary Register as :—			
(a) Recovered	38	8	46
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	—	—	245
D.—NUMBER OF CASES on Dispensary Register on December 31st :—			
(a) Definitely tuberculous ...	320	75	395
(b) Diagnosis not completed ...	—	—	15

1. Number of cases on Dispensary Register on January 1st...	419
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...	36
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	70
4. Cases written off during the year as Dead (all causes) ...	34
5. Number of attendances at the Dispensary (including contacts)...	1,339
6. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above...	2
7. Number of "T.B. plus" cases on Dispensary Register on December 31st ...	160

The tables opposite page 36 show in summary form the condition of all patients whose records are in the possession of the Dispensaries and, before studying these, the following notes on classification, etc., should be read :—

Patients diagnosed as suffering from *Pulmonary Tuberculosis* are placed in the following categories :—

Class T.B. minus, viz., cases in which tubercle bacilli have never been demonstrated in the sputum, pleural fluid, faeces, etc.

Class T.B. plus, viz., cases in which tubercle bacilli have at any time been found. It should be noted that a patient originally in Class T.B. minus must be transferred to Class T.B. plus at any stage in the course of treatment if and when tubercle bacilli are found ; while, on the other hand, a patient who is once placed in Class T.B. plus can never revert to Class T.B. minus.

Class T.B. plus is further subdivided into three groups as follows :—

Group 1.—Cases with slight constitutional disturbance, if any, e.g., there should not be marked acceleration of pulse nor elevation of temperature except of very transient duration ; gastro-intestinal disturbance or emaciation, if present, should not be excessive.

The obvious physical signs should be of very limited extent as follows :—Either present in one lobe only and in the case of an apical lesion of one upper lobe not extending below the second rib in front or not exceeding an equivalent area in any one lobe ; or where these physical signs are present in more than one lobe they should be limited to the apices of the upper lobes and should not extend below the clavicle and the spine of the scapula.

No complication (tuberculous or other) of prognostic gravity should be present. A small area of dry pleurisy does not exclude a case from this group.

Group 3.—Cases with profound systemic disturbance or constitutional deterioration, with marked impairment of function either local or general, and with little or no prospect of recovery.

All cases with grave complications (e.g., diabetes, tuberculosis of intestine, etc.), whether those complications are tuberculous or not, are classified in this group.

Group 2.—All cases which cannot be placed in Groups 1 and 3. Patients suffering from Non-pulmonary Tuberculosis are classified according to the site of the lesion as follows :—

- (1) Tuberculosis of bones and joints.
- (2) Abdominal Tuberculosis (i.e., tuberculosis of peritoneum, intestines or mesenteric glands).
- (3) Tuberculosis of other organs.
- (4) Tuberculosis of peripheral glands.

Patients suffering from multiple lesions are classified in one subgroup only, viz., in that applicable to the case which stands highest in the immediately preceding list.

The following terms are used to describe the results of treatment :—

“*Quiescent.*”—Cases which have no symptoms of tuberculosis and no signs of tuberculous disease except such as are compatible with a completely healed lesion, and in which sputum, if present, is free from tubercle bacilli.

“*Arrested.*”—Cases in which, if pulmonary, the disease has been “quiescent” for a period of at least two years, or, if non-pulmonary, the disease is “quiescent” and there is reason to believe that it is unlikely to recur.

“*Recovered.*”—Cases in which arrest of the disease has been maintained for at least three years.

RESIDENTIAL INSTITUTIONS.

NUMBER OF BEDS AVAILABLE FOR THE TREATMENT OF TUBERCULOSIS
ON THE 31ST DECEMBER, 1938, IN INSTITUTIONS
BELONGING TO THE COUNCIL.

Name of Institution.	For PULMONARY cases.		For NON-PULMONARY cases.		TOTAL.
	Adults.	Children under 15.	Adults.	Children under 15.	
Wooley Sanatorium, Nr. Hexham	180	...	4	...	184
<i>Poor Law Institutions.</i> Dene Street House, Hexham	6	...	...	...	6

RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT AND
OBSERVATION DURING THE YEAR 1938 IN INSTITUTIONS (OTHER
THAN POOR LAW INSTITUTIONS) APPROVED FOR THE
TREATMENT OF TUBERCULOSIS.

		In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of doubtfully tuberculous cases admitted for observation	Adult M.	3	51	46	...	8
	F.	3	35	31	...	7
	Children	4	64	65	...	3
	TOTAL	10	150	142	—	18
Number of patients suffering from pulmonary tuberculosis.	Adult M.	88	120	107	10	91
	F.	67	95	91	6	65
	Children	48	55	55	1	47
	TOTAL	203	270	253	17	203
Number of patients suffering from non-pulmonary tuberculosis.	Adult M.	1	1	1	...	1
	F.	...	1	1	...	...
	Children	49	50	48	...	51
	TOTAL	50	52	50	...	52
GRAND TOTAL ...		263	472	445	17	273

RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT PROVIDED
DURING THE YEAR 1938, IN POOR LAW INSTITUTIONS FOR
PERSONS CHARGEABLE TO THE COUNCIL.

		In Insti- tutions on Jan. 1st.	Admltted during the year.	Discharged during the year.	Died in the Insti- tutions.	In Insti- tutions on Dec. 31st.
Number of patients suffering from pulmonary tuberculosis.	Adult Males ...	10	20	13	4	13
	Adult Females	8	24	15	8	9
	Children...	2	3	3	1	1
	TOTAL ...	20	47	31	13	23
Number of patients suffering from non-pulmonary tuberculosis.	Adult Males ...	6	15	12	4	5
	Adult Females	3	11	6	3	5
	Children...	3	2	1	...	4
	TOTAL ...	12	28	19	7	14
GRAND TOTAL ...		32	75	50	20	37

RETURN SHOWING THE RESULTS OF OBSERVATION OF DOUBTFULLY
TUBERCULOUS CASES DISCHARGED DURING THE YEAR 1938
FROM INSTITUTIONS APPROVED FOR THE TREATMENT OF
TUBERCULOSIS.

Diagnosis on discharge from observation.	FOR PULMONARY TUBERCULOSIS.						FOR NON-PULMONARY TUBERCULOSIS.						TOTALS.		
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous ...	13	8	33	13	7	8	...	...	3	...	...	5	26	15	49
Non-tuberculous	...	4	3	20	12	9	...	...	2	...	...	2	20	16	16
Doubtful... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS ...	13	12	36	33	19	17	...	...	5	...	...	7	46	31	65

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF DEFINITELY
TUBERCULOUS PATIENTS DISCHARGED DURING THE YEAR 1938
FROM INSTITUTIONS (OTHER THAN POOR-LAW INSTITUTIONS) APPROVED
FOR THE TREATMENT OF TUBERCULOSIS.

Classification on admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in Institution.															GRAND TOTALS.
			Under 3 mths. but exceeding 28 days.			3-6 months			6-12 months.			More than 12 months.			Totals.			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent	3	3	2	5	8	11	2	3	19	3	2	15	13	16	47	76
		Not quiescent ...	4	1	...	4	1	1	3	1	2	1	...	2	12	3	5	20
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Class T.B. plus Group I.	Quiescent ... ..	...	...	...	1	...	...	1	1	...	...	...	...	2	1	...	3
		Not quiescent ...	3	2	...	2	1	...	2	1	...	1	1	...	8	5	...	13
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Class T.B. plus Group II.	Quiescent ... ..	...	...	...	...	1	...	...	1	1	2	4	1	2	6	2	10
		Not quiescent ...	3	3	...	11	5	...	6	12	...	15	18	...	35	38	...	73
		Died in Institution	...	...	...	...	...	...	...	1	...	...	2	...	...	3	...	3
	Class T.B. plus Group III.	Quiescent ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Not quiescent ...	5	1	...	4	5	...	10	8	...	9	4	1	28	18	1	47
		Died in Institution	3	2	...	1	...	...	1	...	...	4	...	1	9	2	1	12
	TOTALS.	PULMONARY ...	21	12	2	28	21	12	25	28	22	35	31	20	109	92	56	257
NON-PULMONARY TUBERCULOSIS.	Bones and Joints.	Quiescent ... ..	...	...	...	...	...	...	...	...	2	...	...	9	...	...	11	11
		Not quiescent ...	...	...	...	1	...	1	...	...	...	...	...	...	1	...	1	2
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Abdominal.	Quiescent ... ..	...	...	...	...	...	9	...	...	4	...	...	1	...	...	14	14
		Not quiescent ...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Organs.	Quiescent ... ..	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2	2
		Not quiescent ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Peripheral Glands.	Quiescent ... ..	...	...	...	...	...	7	...	...	9	...	...	2	...	...	18	18
		Not quiescent ...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	2	2
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	TOTALS.	NON-PULMONARY	...	1	1	1	...	19	...	...	15	...	...	13	1	1	48	50

REPORT OF THE MEDICAL SUPERINTENDENT
OF WOOLEY SANATORIUM,
FOR THE YEAR ENDED 31ST DECEMBER, 1938.

During the year ended 31st December, 1938, 252 patients were discharged from the Sanatorium, classified as follows :—

Quiescent	...	...	...	...	...	...	39
Improved	...	...	...	...	...	...	101
No material improvement	...	...	...	...	...	...	59
Died	...	...	...	...	...	...	16
Non-tuberculous	...	...	...	...	...	...	37
							<hr/>
							252
							<hr/>

Of this number, 28 (15 female and 13 male) were re-admissions.

Treatment.

Artificial Pneumothorax was induced in 33 cases.

1,309 Refills were given to in-patients.

104 Refills were given to out-patients from the Hexham Dispensary area.

Pneumothorax cases from the rest of the County continue on discharge to be handed over to Dr. Dickinson, of Newcastle. The suggestion contained in last year's report, regarding closer co-operation and consultation between Dr. Dickinson and the Medical Superintendent, was approved and such consultations have regularly taken place during the year.

Bi-lateral Pneumothorax was induced in two cases.

Thoracic Surgery.

The following operations were performed on Sanatorium patients at the Hexham Hospital during the year by Mr. George A. Mason, F.R.C.S. :—

Thoracoscopy and division of adhesions	...	23
Operations on the phrenic nerve	... ..	3
Thoracoplasty operations, involving 9 patients...		15
Korrekturplasty	... ..	1
Biopsy of gland of neck	... ..	1
		<hr/>
Total number of operations	... ..	43
		<hr/>

X-Ray.

675 X-Ray photographs of the chest were taken of patients undergoing treatment.

38 Films were taken of out-patients referred from the Hexham Dispensary.

The usual routine screening of pneumothorax cases was carried out, and out-patients were screened as they attended for their refills.

Laboratory.

945 Microscopic examinations of the sputum were made.

Average Duration of Stay.

		1935.	1936.	1937.	1938.
		Days.	Days.	Days.	Days.
Male	...	228.60	248.67	265.40	292.82
Female	...	221.30	301.68	217.15	270.97

Occupations.

The occupations of the patients discharged were as follows :—

Male.

Army Officer	...	...	1	Plumber	...	...	1
Art Master	...	...	1	Porter	...	...	1
Blacksmith	...	...	1	Process Assistant	...	...	1
Bricklayer	...	...	1	Publican	...	...	2
Bus Conductor	...	...	1	Quarryman	...	...	2
Butcher	...	...	1	Relieving Officer	...	...	1
Clerk	...	...	4	Rent Collector	...	...	1
Colliery Horse-man	...	...	1	Sailor	...	...	2
Commercial Traveller	...	...	1	School Teacher	...	...	1
Electrician	...	...	1	Shepherd	...	...	1
Engineer	...	...	3	Shipbroker	...	...	1
Engine Driver	...	...	1	Shipyards Labourer	...	...	2
Farmer	...	...	1	Signalman	...	...	2
Farmhand	...	...	9	Signwriter	...	...	1
Fitter and Turner	...	...	6	Shop Assistant	...	...	3
Gardener	...	...	1	Steelworker	...	...	2
Glass-blower	...	...	1	Storekeeper	...	...	1
Grocer	...	...	2	Student	...	...	1
Joiner	...	...	3	Time-keeper	...	...	1
Labourer	...	...	17	Traction Engine Driver	...	...	1
Lamp Attendant, Colliery	...	...	1	Van Salesman	...	...	1
Laundry Worker	...	...	1	Waggon Repairer	...	...	1
Miner	...	...	38	Welder's Counter	...	...	1
Medical Practitioner	...	...	2	None	...	...	2
Mental Nurse	...	...	1				
Motor Driver	...	...	1				
Moulder	...	...	1				
Naval Pensioner	...	...	1				
Plater	...	...	2				
							138

Female.

Bus Conductress	...	...	1	Nursemaid	...	...	1
Clerk	...	...	4	Ropespinner	...	...	1
Domestic Duties	...	...	35	School Teacher	...	...	1
Foster-mother	...	...	1	Shop Assistant	...	...	9
Farm Worker	...	...	2	Typist	...	...	1
Housewife	...	...	50				
Hairdresser	...	...	2				
Milliner	...	...	1				
Nurse	...	...	5				
							114

COUNTY LABORATORY, 1938.

The total number of reports furnished on specimens submitted for examination during the year was 28,235, compared with 16,597 for 1937. This increase is accounted for by two factors (i) a large increase in the number of throat swabs, etc., sent for examination for *B. diphtheriae* and for haemolytic streptococci, (ii) the fact that this report covers the first full year since

certain bacteriological work was undertaken for the Corporation of Newcastle upon Tyne, the total number of specimens examined for the City authority being 6,841.

The following table indicates the nature of the pathological specimens dealt with and a summary of the results.

TABLE I.

I.—*Tuberculosis.*

(i) Microscopical examinations :—

1,574 specimens of sputum	226 positive.
38 „ pus	7 „
11 „ urine	1 „
2 „ gastric juice	1 „
1 „ faeces	1 „
1 „ bone	
1 „ lymph gland.	

(ii) Biological tests.

7 Specimens of sputum and 4 of pus were examined by biological test (1 sputum proving positive).

(iii) Cultural examinations.

Cultures were made from 33 specimens—stomach washings 1, sputum 11, urine 7, pleural fluid 5, faeces 2, pus 6, cerebro-spinal fluid 1. Tubercle bacilli were grown from 6 of these, four of which had previously proved negative on microscopical examination.

II.—*Diphtheria, etc.*

9,789 Swabs from throat, nose, etc., were examined for *B.diphtheriae*, 2,066 being positive. (As noted above this represents a large increase over last year, the corresponding figures in 1937 being 5,443 and 1,021 respectively).

1,586 Swabs were examined for haemolytic streptococci, 345 being positive.

11 Swabs were examined by direct smear for Vincent's organisms.

189 Swabs or cultures were submitted for isolation of *B.diphtheriae* and virulence test. Of the organisms isolated 135 proved to be virulent *B.diphtheriae*.

3 Samples of milk were sent for examination for *B.diphtheriae* and one for haemolytic streptococci—the result in each case being negative.

III.—*Enteric Fevers, Dysentery, etc.*

98 Specimens of blood were submitted for agglutination reactions with organisms of the enteric group; 15 gave positive reactions with *B.typhosus* and 6 with *B.paratyphosus B.* The practice of testing all specimens against *Br.abortus* has been continued and 5 positive reactions with this organism were obtained.

146 Specimens of faeces and 3 of urine were examined for organisms of the enteric-dysentery group, and the following organisms were isolated :—

B.typhosus, 2. *B.dysenteriae* Sonne, 11.
B.paratyphosus B., 15. *S.enteritidis* Gaertner, 2.

IV.—*Meningitis.*

18 Specimens of cerebro-spinal fluid and 3 post-nasal swabs were submitted from cases of suspected meningitis. B.tuberculosis was found in 3 of the spinal fluids and meningococci in one.

V.—*Venereal Diseases.*

This section of the work also shows a large increase over the previous year, the total number of examinations being 10,564 as against 3,824 in 1937. The examinations comprised :—

(a) *Syphilis.*

2 Specimens of serum for microscopical examination for *Sp.pallida*.

6,317	„	blood for Wassermann reaction.
1,853	„	blood for Flocculation test (MKR. II).
311	„	cerebro-spinal fluid for Wassermann reaction.
92	„	cerebro-spinal fluid for Colloidal gold test, etc.

(b) *Gonorrhoea.*

179 Microscopical examinations of films for gonococci.

1,810 Specimens of blood for complement fixation test.

Of the total examinations 7,937 were carried out on behalf of the Joint Committee's Clinic, 1,816 for hospitals and other institutions, and 811 for private practitioners. A detailed distribution of the specimens is shown in the following table.

TABLE II.

	COUNTY.			CITY.		
	Joint Committee's Clinic.	Hosp. and Inst.	Private Practice.	Joint Committee's Clinic.	Hosp. and Inst.	Private Practice.
Micro. <i>Sp.pallida</i> ...	—	—	—	—	1	1
Micro. <i>Gonococci</i> ...	—	—	44	—	—	135
Blood Wassermann ..	1,607	455	254	2,503	1,178	320
Blood MKR II ...	991	4	—	852	4	2
C.S.F. Wassermann ...	75	63	2	69	102	—
C.S.F. Goldsol, etc. ...	73	1	1	17	—	—
Blood G.C.F.T. ...	595	1	13	1,155	7	39
TOTAL ...	3,341	524	314	4,596	1,292	497

VI.—*Miscellaneous pathological specimens.*

The following examinations, not classified above, have also been carried out :—

Pleural fluids 16, urines 24, blood cultures 4, swabs from various sources 5, 1 urine and 1 blood for leptospira, 1 ascitic fluid, 4 faeces for occult blood, 1 blood for differential count, 1 cerebro-spinal fluid (for type of tubercle bacillus), 1 specimen of therapeutic serum for sterility test, 2 samples of honey, 1 sample of milk for Br. Abortus.

VII.—*Milk.*

(a) Samples for cleanliness test.

(Methylene blue reduction test and *B.coli.*), 1,762.(b) Samples for *B.tuberculosis*.

(i) Microscopical examination 44 5 positive.

(ii) Biological test ... 2,111 108 „

VIII.—*Water.*173 Samples were examined for bacterial count and *B.coli*.

Table III shows the number of certain pathological specimens received from the various administrative districts in the County.

TABLE III.

District.			Sputa for B. Tuberculosis.			Swabs for B. Diphtheriae.			Bloods for Agglutination.			Miscellaneous. Total.	TOTAL
			+	—	Total.	+	—	Total.	+	—	Total.		
Boroughs.													
Berwick	...	...	5	30	35	49	73	122	1	3	4	14	175
Blyth	...	...	30	133	163	36	128	164	1	4	5	23	355
Morpeth	...	...	...	16	16	18	54	72	1	1	2	24	114
Wallsend	...	...	40	172	212	319	671	990	4	7	11	127	1,340
Urban Districts.													
Alnwick	...	...	6	42	48	11	28	39	...	1	1	17	105
Amble	...	...	3	4	7	...	6	6	...	...	...	2	15
Ashington	...	...	11	106	117	724	1,240	1,964	1	4	5	430	2,516
Bedlington	...	...	19	138	157	39	179	218	1	8	9	35	419
Gosforth	...	...	5	51	56	39	250	289	2	...	2	42	389
Hexham	...	...	7	42	49	13	75	88	2	...	2	58	197
Longbenton	...	...	7	62	69	49	761	810	1	...	1	23	903
Newbiggin	...	...	2	67	69	52	166	218	...	3	3	115	405
Newburn	...	...	15	66	81	41	269	310	...	1	1	3	395
Prudhoe	...	...	1	19	20	8	41	49	...	1	1	23	93
Seaton Valley	...	...	12	52	64	43	230	273	...	2	2	21	360
Whitley & Monkseaton	...	...	22	117	139	36	347	383	1	4	5	76	603
Rural Districts.													
Alnwick	...	...	6	35	41	13	55	68	1	2	3	18	130
Belford	...	...	1	9	10	1	15	16	...	2	2	16	44
Bellingham	...	...	3	9	12	...	13	13	...	...	...	4	29
Castle Ward	...	...	5	37	42	76	1,155	1,231	2	4	6	581	1,860
Glendale	...	...	...	28	28	...	23	23	...	2	2	26	79
Haltwhistle	...	...	1	6	7	2	9	11	...	2	2	3	23
Hexham	...	...	9	47	56	20	133	153	4	9	13	62	284
Morpeth	...	...	7	38	45	12	65	77	2	5	7	14	143
Norham & Islandshires	...	...	1	3	4	...	8	8	1	...	1	5	18
Rothbury	...	...	6	13	19	8	71	79	...	1	1	20	119
Forest Hall Hosp.	...	...	...	...	...	274	1,342	1,616	...	...	...	193	1,809
Lemington Hosp.	...	...	...	...	...	183	300	483	...	...	...	7	490
Others	...	...	2	6	8	...	16	16	1	6	7	17	48
Newcastle C.B.C.	...	...	...	...	...	...	...	...	...	...	...	88	88
TOTALS			226	1,348	1,574	2,066	7,723	9,789	26	72	98	2,087	13,548

Milk Samples for B.Tuberculosis.

A total of 2,116 samples were submitted for examination, 1,827 were samples of bulk milk collected by various authorities. All were examined by biological test, the results being as follows :—Positive, 68 (3.9%), negative, 1,671, inconclusive, 88.

The following were included among the bulk samples :—

				Number.	Number Positive.
Tuberculin Tested	...	...	...	38	1
Accredited	...	...	...	616	14
Pasteurised	...	...	...	10	1
Sterilised ...	...	...	...	2	—
School Milks	...	...	...	97	5

The districts in which the various samples were collected are shown in Table IV below.

TABLE IV.

Milk samples for B.tuberculosis.

District.	Inconclusive.	Positive.	Negative.	TOTAL.
Berwick ... ..	...	1	7	8
Blyth	1	...	5	6
Morpeth ... ..	...	...	6	6
Wallsend	1	2	9	12
Alnwick ... ..	...	...	5	5
Amble ... ..	...	1	13	14
Ashington... ..	6	4	58	68
Bedlington	2	2	42	46
Gosforth ... ..	...	...	5	5
Hexham	2	...	1	3
Longbenton	2	4	67	73
Newbiggin	2	2	46	50
Newburn	3	1	69	73
Seaton Valley	7	4	127	138
Whitley & Monkseaton...	10	11	181	202
Alnwick	1	3	66	70
Belford ... ..	...	...	11	11
Bellingham ... ..	...	...	7	7
Castle Ward	7	3	145	155
Glendale ... ..	...	...	18	18
Haltwhistle ... ..	...	...	15	15
Hexham	16	3	316	335
Morpeth	3	3	116	122
Norham & Islandshires...	...	...	5	5
Rothbury ... ..	...	...	11	11
Veterinary Dept.	2	11	62	75
Ministry of Agriculture	2	34	178	214
Newcastle C.B.C.	25	24	319	368
TOTALS	92	113	1,911	2,116

75 Samples were submitted by the County Veterinary Department, 5 of these proved positive on microscopic examination and were not further investigated. The remaining 70 were examined by biological test as a result of which a further 6 samples were found to be positive.

214 Samples were submitted by the Ministry of Agriculture & Fisheries and were examined by biological test, 34 of these samples were found to be positive.

Milk samples examined by the Methylene Blue Reduction Test.

The total number examined was 1,762; 679 were "ordinary" milks, 1,074 were "designated" milks and the remaining 9 were described as "sterilised."

Table V. shows the districts from which the samples were received.

TABLE V.

Milk samples for Methylene Blue Reduction Test and B.coli.

District.	Ordinary.	Tuberculin Tested.	Accredited.	Pasteurised.	Sterilised.	TOTAL.
Berwick	5	3	7	...	...	15
Blyth ... ..	...	6	5	...	...	11
Morpeth	7	...	4	2	...	13
Wallsend... ..	25	1	11	6	1	44
Alnwick	3	...	8	...	...	11
Amble	4	1	20	...	...	25
Ashington	58	10	...	18	...	86
Bedlington	37	...	15	...	...	52
Gosforth... ..	30	1	17	1	...	49
Hexham ... ..	...	...	5	...	...	5
Longbenton	65	4	10	10	...	89
Newbiggin	43	1	7	2	...	53
Newburn... ..	76	3	24	5	8	116
Prudhoe	12	...	...	...	...	12
Seaton Valley	74	3	81	4	...	162
Whitley & Monkseaton	176	17	5	6	...	204
Alnwick	7	11	83	...	...	101
Belford	1	10	11	...	...	22
Bellingham	7	...	...	...	...	7
Castle Ward	3	11	160	...	...	174
Glendale... ..	10	6	13	...	...	29
Haltwhistle	15	...	8	1	...	24
Hexham	5	19	240	4	...	268
Morpeth	13	29	113	2	...	157
Norham & Islandshires	2	2	5	...	...	9
Rothbury	1	1	20	...	...	22
Jarrow ... ..	...	2	...	...	...	2
TOTALS	679	141	872	61	9	1,762

The results of the examinations of the samples were as follows :—

Classification.	Complied with standard.	Did not comply.		TOTAL.
		Number.	Per cent.	
Tuberculin Tested	102	39	27.9	141
Accredited	677	195	22.3	872
Pasteurised	50	11	18.03	61
Ordinary	*294	385	56.7	679
	1,123	630	35.9	1,753
School Milks included among the above	*63	99	61.1	162

* With Standard for Accredited Milk.

With regard to the 9 samples of “sterilised” milk, none contained B.coli in quantities of 1.0cc. or less and the bacterial count was recorded as Nil.

Water Samples.

173 Samples were submitted for examination. The results are shown in the following table :—

Sample submitted by :	Number of Samples.	Classification.		
		I.	II.	III.
Berwick	12	10	2	...
Blyth	1	...	1	...
Morpeth	12	10	2	...
Wallsend	1	1	...	...
Amble	2	1	1	...
Ashington	15	6	7	2
Bedlington	5	1	3	1
Hexham	8	4	3	1
Longbenton	3	2	1	...
Newbiggin	15	12	3	...
Newburn	6	6	...	...
Prudhoe	6	5	...	1
Seaton Valley	4	3	...	1
Whitley and Monkseaton	2	2	...	...
Alnwick	14	11	2	1
Belford	8	4	2	2
Bellingham	15	9	5	1
Castle Ward	9	3	...	6
Glendale	2	2	...	...
Hexham	12	5	2	5
Morpeth	2	2	...	...
Norham	8	6	...	2
Rothbury	6	2	3	1
County Health Department	5	3	1	1
TOTALS	173	110	38	25

FOOD INSPECTION.

The examination of milk samples from dairy herds for the detection of Tuberculosis has been continued during the year.

The total number of samples tested was 1,732. Of this number, 182 proved to have come from farms outside the county area and are therefore excluded from the analysis, the net total thus being 1,550.

Tubercle bacilli were found in 52 samples (0.033%), and 38 animals were destroyed after being proved to be infected. In 14 cases the offending animal or animals proved untraceable. This is rather a serious aspect of the matter which, at the moment, appears unavoidable, due to either of two factors, i.e. (a) removal of the offending animal from the herd between the time of the first sample being taken and the result of the test being known; or (b) to the offending animal being an "intermittent secretor." In other words an animal that gives milk *intermittently infected*.

Since the inception of this scheme (October, 1927) no less than 6,999 samples have been taken, of which 407 (5.8%) were found to contain tubercle bacilli, resulting in the ultimate slaughtering of 241 infected animals.

A table is given opposite showing the progress of this scheme since its inception, together with a summary of results. A perusal of the summary reveals an interesting analysis.

During the last ten years it has been frequently stated by responsible persons that the incidence of Tuberculosis amongst dairy cattle in this country was extremely high, the estimates given varying between 20% and 30%, and in a rare instance or two even higher.

NORTHUMBERLAND COUNTY COUNCIL.

(MILK AND DAIRIES (CONSOLIDATION) ACT, 1915. S.S.) (MILK AND DAIRIES ORDER, 1926. PART IV.)
 ROUTINE MILK SAMPLING—1927 (Oct.) to 1938 (Dec.).

Sanitary Districts.	Latest available Figures.		1927 to 1937 (inclusive).					1938.		TOTAL.	
	No. of Cow-keepers.	No. of Cows kept.	No. of Samples.	No. of Cows slaughtered.	No. of Samples.	No. found to contain Tub. Bac.	No. of Cows slaughtered.	No. found to contain Tub. Bac.	No. of Samples.	No. found to contain Tub. Bac.	No. of Cows slaughtered.
<i>Municipal Boroughs.</i>											
1. Berwick-on-Tweed	38	156	59	1	8	1	1	1	67	2	2
2. Blyth	19	258	56	1	5	1	1	...	61	1	1
3. Morpeth	8	148	14	...	6	...	...	...	20	...	...
4. Wallsend	9	143	29	...	12	2	9	2	41	4	11
<i>Urban Districts.</i>											
5. Alnwick	16	120	44	...	7	1	...	...	51	1	...
6. Amble	7	132	42	...	14	...	...	1	56	1	2
7. Ashington	10	190	251	...	65	11	3	8	316	19	6
8. Bedlington	47	560	355	18	44	25	18	2	399	27	19
9. Gosforth	4	115	42	1	5	1	1	...	47	1	1
10. Hexham	27	465	67	1	15	2	1	...	82	2	2
11. Longbenton	19	460	241	8	72	24	8	4	313	28	10
12. Newbiggin-by-Sea	6	125	136	5	48	10	5	3	184	13	8
13. Newburn	15	300	446	23	72	33	23	2	518	35	24
14. Prudhoe	24	240	45	1	...	3	1	...	45	3	1
15. Seaton Valley	36	382	423	30	139	52	30	3	562	55	32
16. Whitley and Monkseaton	8	100	777	9	198	36	9	12	975	48	13
<i>Rural Districts.</i>											
17. Alnwick	118	1,100	211	7	86	6	7	3	297	9	8
18. Belford	18	356	70	1	16	1	1	...	86	1	2
19. Bellingham	31	126	36	...	9	...	...	...	45	...	...
20. Castle Ward	110	2,340	377	13	189	23	13	5	566	28	20
21. Glendale	27	236	92	...	21	2	...	...	113	2	...
22. Haltwhistle	226	1,582	62	1	15	2	1	...	77	2	1
23. Hexham	627	8,000	1,406	43	343	65	43	3	1,749	68	46
24. Morpeth	118	1,580	537	28	141	34	28	3	678	37	32
25. Northam and Islands.	30	221	79	...	8	...	...	...	87	...	...
26. Rothbury	10	145	52	...	12	1	...	...	64	1	...
Total	1,608	18,580	5,949	203	1,550	336	203	52	7,499	388	241

SUMMARY OF EXAMINATIONS OF MILK SAMPLES FOR TUBERCULOSIS FROM HERDS WITHIN THE COUNTY, FROM OCT., 1927, TO DEC., 1938.

Period.	No. of Samples Collected	No. of Cows represented.	% of Cows in County Tested.	No. of Herds represented.	% of Herds Tested.	No. of Samples found to be infected.	% of Herds giving infected Milk.	% of Cows found to be Tubercular.	No. of Cows slaughtered.
Oct., 1927, to Dec. 31st, 1928	(1) 318	(2) 2,872	(3) 23.50	(4) 227	(5) 16.3	(6) 10	(7) 4.27	(8) 0.52	(9) 15
Jan., 1929, to Dec. 31st, 1929	242	2,104	16.00	190	13.4	12	5.26	0.57	8
Jan., 1930, to Dec. 31st, 1930	277	2,073	15.80	211	15.14	18	5.68	0.62	13
Jan., 1931, to Dec. 31st, 1931	207	1,676	12.10	161	11.54	*10	3.72	0.17	3
Jan., 1932, to Dec. 31st, 1932	455	3,587	25.90	342	24.51	**15	3.21	0.16	6
Jan., 1933, to Dec. 31st, 1933	428	4,964	35.83	362	25.94	†29	7.18	0.28	14
Jan., 1934, to Dec. 31st, 1934	587	†5,800	39.23	497	34.40	‡41	6.84	0.12	28
Jan., 1935, to Dec. 31st, 1935	928	†8,890	...	889	...	46	4.04	0.37	33
Jan., 1936, to Dec. 31st, 1936	1,253	†12,500	...	1,253	...	75	5.98	0.35	44
Jan., 1937, to Dec. 31st, 1937	1,254	†13,090	...	1,309	...	78	5.95	0.29	39
Jan., 1938, to Dec. 31st, 1938	1,550	†17,902	...	1,468	...	73	4.97	0.21	38

† Approx. * 8 herds. ** 11 herds. ‡ 26 herds. †† 34 herds.

On whatever basis such estimates may have been arrived at, the figures are not borne out by the results shown in the accompanying tabular statement.

The highest herd incidence occurring therein is 7.18% (in 1933), whilst the individual incidence varies between 0.16% and 0.57%. Such percentages are, of course, subject to a slight increase on the grounds of "undiscovered" infected animals, i.e., the difference between 388 "positive" samples and 241 slaughtered animals.

Even so, the adjustment would not alter the analysis more than 50% of its present quantity, and the result is still far short of the estimates already referred to.

With the advent of compulsory veterinary examination of all herds of dairy cattle it may be that more evidence will be forthcoming which will prove or disprove the theory of a high incidence, either in the country as a whole, or this county in particular.

Certainly the outcome will be watched with interest.

Milk (Special Designations) Order, 1936.

The number of licences issued during the year under the provisions of the above Order were as follows :—

"Tuberculin Tested" (Certified)	...	...	...	16
"Tuberculin Tested" (bulk)	...	...	...	11
"Accredited"...	...	...	...	188

As follows :—

"Tuberculin Tested" Certified :—

- Reg. No. 4. W. Miller, Hobberlaw, Alnwick.
 5. G. Y. McNay, Morwick, Warkworth.
 9. Eshott Pedigree Stock Farms, East Farm, Felton.
 10. Eshott Pedigree Stock Farms, Home Farm, Felton.
 11. J. E. Jordon, Old Moor Farm, Longhirst, Morpeth.
 12. R. Douglas, Ashington Farm, Ashington.
 13. Wm. Robson, Low Horton, Bebside, Blyth.
 14. J. E. Jordon, Red House Farm, Hartley, Seaton Delaval.
 15. M. Jordon, Whorlton Hall, Westerhope, Newcastle.
 16. D. H. Sanderson, The Birks, Stamfordham.
 17. C. S. Richardson, Wheelbirks, Stocksfield.
 18. A. M. Keith, Walwick Grange, Humshaugh.
 19. J. J. Philipson, Bishopfield, Allendale.
 23. Netherton Training School, Netherton, Morpeth.
 25. Ashington Coal Co., Ltd., East Moor Farm, Ashington.
 28. Alex. F. Moralee, Fawdon Red House, Gosforth.

"Tuberculin Tested" (bulk) :—

- Reg. No. 1. The Hon. Mrs. Runciman, Doxford Home Farm, Chathill.
 2. C. H. Sanderson, Newlands, Belford.
 3. R. Armstrong, Bowsden Hall, Bowsden, Berwick.
 7. F. J. Hemsley, Woodside, Red Row, Morpeth.
 8. A. B. Howie, Eshott Brocks, Felton.
 20. J. S. V. Harrison, Pia Troon, Allendale.
 21. Philipson Farm Colony, Stannington, Newcastle.
 22. G. T. Dinning & Son, East Woodfoot, Slaley.
 24. Robt. Burton, East Newburn, Norham-on-Tweed.
 26. Thos. F. Shell, Denwick Lane End, Alnwick.
 27. A. J. W. Thompson, Silvermoor, Alnwick.

One licence was withdrawn on account of breaches of the Order, and two were surrendered.

Three additions to this list were recruited from holders of "Accredited" licences.

"Accredited" :—

Reg. No.	Name.		County District.
1	C. H. Dickie ...	Wooperton Farm ...	Glendale R.
2	J. H. Patterson & Sons ...	Wooler ...	Do.
3	G. H. Davidson ...	Norham-on-Tweed ...	Norham & Is. R.
4	H. Hunter & Sons ...	Belford ...	Belford R.
5	R. Urwin ...	Do. ...	Do.
6	W. S. D. Buchanan...	Berwick-on-Tweed ...	Berwick M.B.
7	C. S. C. Bosanquet...	Rock ...	Alnwick R.
8	T. F. Shell ...	Denwick Lane End ...	Do.
9	A. J. W. Thompson...	Silvermoor ...	Do.
10	John Beacom ...	Alnwick... ..	Alnwick U.
11	J. K. Woodcock ...	Greenfield Moor ...	Alnwick R.
12	Thos. Fisher ...	Newton-on-the-Moor ...	Do.
13	Wm. Oliver ...	Lemmington Hill Head ...	Do.
14	Leslie Farr ...	Wooden Farm, Anmouth ...	Do.
15	Jas. Shell ...	Waterside House, Alnmouth ...	Do.
16	T. Coltherd ...	Acklington ...	Do.
17	D. Fairbairn ...	Lesbury Mill ...	Do.
18	Jas. Gray ...	Boulmer House, Alnmouth ...	Do.
19	R. English ...	Dene House, Amble ...	Amble U.
20	J. Forsyth ...	Hope House, Amble ...	Do.
21	J. D. Forsyth ...	Gloster Hill, Amble ...	Alnwick R.
22	Mrs. M. Forsyth ...	Old Barns, Warkworth ...	Do.
23	Wm. Dobson ...	Thropton, Rothbury ...	Rothbury R.
24	Geo. McKenzie ...	Whitton Glebe, Rothbury ...	Do.
25	Geo. Jackson ...	Earsdon, Morpeth ...	Morpeth R.
26	Mary Brown ...	West Lane End, Morpeth ...	Do.
27	Exrs. late C. Alderson	East Chevington ...	Do.
28	John Jobson ...	South Broomhill ...	Do.
29	Jas. Moor ...	Togston Terr., Broomhill ...	Alnwick R.
30	P. O. Turnbull ...	Broomhill Farm ...	Morpeth R.
31	T. W. Bell ...	West Chevington, Morpeth ...	Do.
32	And. Luke ...	So. East Farm, Eshott ...	Do.
33	Wm. Taylor...	West Moor, Felton ...	Do.
34	J. W. Robson ...	West Howdens, Morpeth ...	Do.
35	W. B. Hemsley ...	Bockenfield, Morpeth...	Do.
36	R. V. Brown ...	Chevington Moor ...	Do.
37	J. Pringle ...	Tritlington W. Farm ...	Do.
38	John Craigs ...	Tritlington Hall ...	Do.
39	A. L. Tait ...	West Stobswood ...	Do.
40	John Hall ...	So. Steads, Widdrington ...	Do.
41	G. F. Mole ...	Grange Moor, Widdrington ...	Do.

“ Accredited ”—continued :—

Reg. No.	Name.		County District.
42	No. Seaton Co-op. Farming Society....	No. Seaton, Ashington	Newbiggin U.
43	Arth. Todd ...	Mill Farm, Ellington ...	Morpeth R.
44	John Craigs ...	Potland Farm, Ashington	Do.
45	J. N. Hine ...	Old Moor Steads, Long- hirst ...	Do.
46	Mrs. A. Moore ...	Broom Hill, Longhirst	Do.
47	O. McBryde...	Pegswood Moor, Morpeth	Do.
48	W. C. Angus ...	Climbing Tree, Morpeth	Do.
49	J. S. Hudson ...	Stobhill, Morpeth ...	Do.
50	T. & A. Bertram ...	West Farm, Nedderton	Bedlingtonshire U.
51	C. H. Faill ...	So. Farm, Nedderton...	Do.
52	H. Bell ...	East Hartford, Cram- lington ...	Seaton Valley U.
53	H. & R. P. Bell ...	Laverock Hall, Cram- lington ...	Do.
54	Mary A. Wilson & Sons ...	Park Farm, Newsham	Blyth M.B.
55	H. N. Bell ...	The Tilery, Cramlington	Seaton Valley U.
56	J. G. Smith...	Beacon Farm, Cram- lington ...	Do.
57	R. Clark ...	Do. do. ...	Do.
58	Hartley Main Colls.	Wheatridge Farm, Seaton Delaval ...	Do.
59	J. A. Jackson ...	Strother Farm, Holywell	Do.
60	F. A. Jackson ...	Holywell Bank Top ...	Do.
61	Jas. Younger ...	Mares Close, Seghill ...	Do.
62	W. J. & J. Younger...	Burradon Farm, Dudley	Do.
63	T. A. Sanderson ...	Hill Head Farm, Burradon ...	Longbenton U.
64	S. Oliver ...	Scotts Ho. Farm, Gos- forth ...	Do.
65	D. B. Cocks...	Bridge End Farm, Wooler ...	Glendale R.
66	Misses A. & E. Forster	Hope House, Alnwick...	Alnwick U.
67	Sept. Charleton ...	West Row, Longfram- lington ...	Rothbury R.
68	A. D. Forsyth ...	North Broomhill, Mor- peth ...	Alnwick R.
69	A. F. Moralee ...	Fawdon Red Ho., Gosforth ...	Gosforth U.
70	Jas. Hudspeth ...	North Brunton, Gos- forth ...	Castle Ward R.
71	J. A. E. Davies ...	Middle Brunton, Gos- forth ...	Do.
72	S. E. Fairbairn ...	West Brunton, Gos- forth ...	Do.
73	Jas. W. Moscrop ...	East Brenkley, Seaton Burn ...	Do.
74	A. Harrison...	Lough House, Stan- ington ...	Do.
75	Jas. Moorhouse ...	West Denton, Lemington	Newburn U.
76	Ed. Charlton ...	Chapel Ho., Walbottle	Do.
77	Robt. A. Arthur ...	Hill Head, Westerhope	Do.

“ Accredited ”—continued :—

Reg. No.	Name.		County District.
78	Currie Bros....	Woolsington High Ho., Kenton	Castle Ward R.
79	M. Jordon ...	Whorlton Hall, Wester- hope	Do.
80	J. L. Johnson ...	Butterlaw, Westerhope	Do.
81	J. J. Hall ...	East Benton Farm ...	Wallsend.
82	F. E. Day ...	Willington Farm ...	Do.
83	John Wright ...	Dumpling Hall, Scots- wood	Newburn U.
84	W. H. & F. Stephen- son...	Eland Green, Ponteland	Castle Ward R.
85	Rex. D. Irwin ...	Kirkley Hall, Ponteland	Do.
86	J. B. Ralph... .	Ogle Castle, Ponteland	Do.
87	F. & J. R. Trobe ...	Roguary Farm, Whalton	Do.
88	T. E. Oliver ...	EasternWay, Ponteland	Do.
89	P. Charlton ...	East House, Dalton ...	Do.
90	W. Herdman ...	Dissington Red Ho., Dalton	Do.
91	R. Alder ...	East Town Farm, Milbourne	Do.
92	S. M. Johnson ...	Milbourne Grange, Milbourne	Do.
93	R. L. Jobling ...	Higham Dykes, Mil- bourne ,	Do.
94	J. B. Spearman ...	Heddon Steads, Hed- don-on-the-Wall ...	Do.
95	Mrs. Bolam & Sons...	Turpins Hill, Heddon- on-the-Wall	Do.
96	H. R. S. Gibb ...	Eachwick House, Dalton	Do.
97	J. H. Charlton ...	Leaguer House, Dalton	Do.
98	A. E. Thompson ...	Loudside, Dalton ...	Do.
99	R. Spearman & Sons	Chapel Farm, Stam- fordham	Do.
100	T. R. Swan...	Coldside, Stamfordham	Do.
101	R. Bell & Son ...	W. Woodside, Heddon- on-the-Wall	Do.
102	Henry Alder ...	Heddon Birks, Heddon- on-the-Wall	Do.
103	W. E. Holmes ...	Birks Cottage, Heddon- on-the-Wall	Do.
104	J. & A. Riddell ...	Crescent Farm, Throck- ley	Do.
105	H. Alder ...	Woodhill, Ponteland ...	Do.
106	J. & J. Watson ...	Mt. Hope, E. Heddon...	Do.
107	J. A. Dodds ...	Heddon Laws, Heddon- on-the-Wall	Do.
108	W. Cannon ...	Breckney Hill, Heddon- on-the-Wall	Do.
109	F. F. & J. W. S. Heslop	Do. do. ...	Do.
110	J. N. Scott ...	Hawthorn Cottage, Heddon-on-the-Wall	Do.
111	T. O. Shield...	Heddon Banks, Heddon- on-the-Wall	Do.

“ Accredited ”—continued :—

Reg. No.	Name.		County District.
112	Throckley Coal Co., Ltd.	South Farm, Newburn	Newburn U.
113	Exrs. of Robt. Graham	Wylam Hills, Wylam...	Hexham R.
114	Miss M. A. Hunter ...	Wylam Wood, Wylam	Do.
115	G. E. Thompson ...	Mount Huly, Ovingham	Do.
116	Thos. Reed	Glebe Farm, Ovingham	Do.
117	Jos. Rowell	Ovington Hall, Oving- ham	Do.
118	J. Longlands ...	Bearl Farm, Stocksfield	Do.
119	J. E. Moffitt ...	Peepy Farm, Stocksfield	Do.
120	R. Batey & Son ...	North Acomb, Stocks- field	Do.
121	J. B. Davidson ...	Styford, Stocksfield ...	Do.
122	Mrs. A. W. & P. Straker	Shaw Well, Corbridge...	Do.
123	Ed. Charlton ...	Shaw House, Stocksfield	Do.
124	W. T. Lockey ...	Horsley Hills, Horsley	Do.
125	R. C. Bramwell ...	High Barns, Horsley ...	Do.
126	Mrs. E. B. Lishman...	Hopside, Horsley ...	Do.
127	R. Cuthbertson ...	Stocksfield Hall, Stocksfield	Do.
128	L. C. Drydon ...	Broomhaugh, Riding Mill	Do.
129	W. J. Ridley ...	Shilford, Stocksfield ...	Do.
130	Wm. Stonehouse ...	Hedley No. Farm, Stocksfield	Do.
131	Mrs. A. J. Luke ...	Hedley Park, Stocksfield	Do.
132	Frank Rowland ...	Mickley Grange, Stocks- field	Do.
133	J. Henderson ...	Rye Hill, Slaley ...	Do.
134	G. C. Robson & Son...	Town Head, Slaley ...	Do.
135	W. P. Jewett ...	Salmonfield, Hexham...	Do.
136	Jos. Johnston ...	Causey Hill, Hexham...	Hexham U.
137	John Johnson ...	Lowgate, Hexham ...	Do.
138	G. W. Milburn ...	Breckon Hill, Hexham	Do.
139	Robt. Green... ..	Bagraw Farm, Hexham	Do.
140	G. T. Rowland ...	Snape Farm, Hexham...	Do.
141	R. M. Lakeman ...	Langhope, Hexham ...	Do.
142	A. M. Keith ...	E. Elrington, Haydon Bridge	Hexham R.
143	Mrs. H. M. Ridley...	Elfoot Farm, Haydon Bridge	Do.
144	J. Jameson & Son ...	E. Nubbock, Hexham...	Do.
145	J. L. Taylor & Sons...	W. Greenridge, Hexham	Do.
146	Mrs. A. E. Blair ...	Sunnyside, Catton, Allendale	Do.
147	Wm. Armstrong ...	Wooley Park, Allendale	Do.
148	T. B. Robinson ...	Hawksteel, Allendale...	Do.
149	Saml. Lee	The Laws, Whitfield ...	Haltwhistle R.
150	Jos. Dodd	Castle Farm, Langley...	Hexham R.
151	T. Dennis Rowell ...	Greenfield, Wall, Hex- ham	Do.
152	N. S. Robinson ...	W. Cocklaw, Wall, Hex- ham	Do.

“ Accredited ”—continued :—

Reg. No.	Name.		County District.
153	R. W. Keen ...	Town Foot, Acomb ...	Hexham R.
154	F. A. Fowkes & Sons	E. Wharmley, Hexham	Do.
155	W. Laidler & Sons...	Anick Grange, Hexham	Do.
156	E. C. Spence ...	Frankham, Fourstones	Do.
157	J. W. Green ...	Settlingstones, Four- stones ...	Do.
158	J. Davison & Son ...	Peel Well, Haydon Bridge ...	Do.
159	Mrs. S. J. Reed ...	Chesterwood Park, Haydon Bridge ...	Do.
160	M. & T. Pigg ...	Chesterwood, Haydon Bridge ...	Do.
161	Nicholas Douglas ...	Lipwood Well, Haydon Bridge ...	Do.
162	Thos. Sowerby ...	Rowfoot, Featherstone Park ...	Haltwhistle R.
163	Thos. Arnison ...	Field Head, Shotley Bridge ...	Hexham R.
164	L. D. Tailford ...	Allensford Mill, Consett	Do.
165	J. & A. Riddell ...	Wallish Walls, Consett	Do.
166	John S. Arnison ...	Eddy's Bridge, Shotley Bridge ...	Do.
167	John Bean ...	Bullions Farm, Kilnpit Hill ...	Do.
168	R. E. Stephenson ...	Espershields, Shotley Bridge ...	Do.
169	J. C. Swallow ...	Kilnpit Hill, Shotley Bridge ...	Do.
170	W. S. Nicholson ...	Grey Mare Hill, Shotley Bridge ...	Do.
171	J. W. Rowell ...	Newlands Grange, Shotley Bridge ...	Do.
172	Andrew Mather ...	New Hall, Amble ...	Amble U.
173	G. W. Hunter ...	Bush Farm, Hexham...	Hexham R.
174	Wm. Scott ...	Birney Hill, Throckley	Castle Ward R.
175	Mrs. Hetherington & Son ...	E. Peterel Field, Hexham	Hexham U.
176	H. Annett ...	Widdrington Farm, Morpeth ...	Morpeth R.
177	H. Weightman ...	Shilford Farm, Stocks- field ...	Hexham R.
178	Jas. Watson...	Sunniside, East Heddon	Castle Ward R.
179	R. Nixon ...	Huntlaw, Dalton ...	Do.
180	F. Arney ...	Hawthorn Cottage, E. Heddon ...	Do.
181	T. J. Common ...	Lipwood Well, Haydon Bridge ...	Hexham R.
182	Leslie Graham ...	Haydon Farm, Haydon Bridge ...	Do.
183	J. W. Charlton ...	South W. Farm, Horsley	Do.
184	M. H. Donaldson ...	Black Row Farm, Throckley ...	Newburn U.
185	John Ainsley ...	Bullocks Hall, Red Row	Morpeth R.

“ Accredited ”—continued :—

Reg. No.	Name.		County District.
186	Robt. Gray ...	Chesterhill Farm, Belford ...	Belford R.
187	J. Dunn & Son ...	Bomarsund Farm, Bedlington ...	Bedlington U.
188	John Angus...	North Cottage Farm, Killingworth...	Longbenton U.

The number of licences issued on the 1st January was 171, and 17 more were added at intervals subsequently.

During the year five licences were surrendered on account of holders leaving their farms, or discontinuing the dairying business, and three licencees became the holders of “ Tuberculin Tested ” licences.

All licensed farms were visited by the County Inspectors periodically to ensure the observance of the conditions required by the Order and the terms of the licence.

The number of samples collected from Accredited farms during the year was 725. All samples were submitted to the County Council's laboratory at Newburn, and were subjected to the Methylene Blue and B.coli. tests.

Six hundred and two (83%) passed the former, and six hundred and fifty (89%) the latter tests.

About 75% of these samples were also tested biologically for Tuberculosis.

MEAT AND FOOD INSPECTION, 1938. PUBLIC HEALTH ACT, 1875, s. 116—119. PUBLIC HEALTH ACT, 1890, s. 28.

Meat and Food condemned as unfit for human consumption on account of diseased or unsound conditions:—

SANITARY DISTRICTS.

Municipal Boroughs.

1. Berwick-on-Tweed	...	6 Beef carcasses, 1 part carcase, 31 Mutton carcasses, 2 part carcasses, 35 Sheeps livers (flake), internal organs of 1 bullock.
2. Blyth	...	Beef 48½ stones, Veal 8 stones, Mutton 13½ stones, Pork 65 stones. Canned goods 112 lbs., other meat foodstuffs 8 stones.
3. Morpeth	...	Beef 52 stones, Mutton 10 stones, Pork 3 stones, Fish 53 stones, Canned goods 30 lbs.
4. Wallsend	...	Beef 192 stones, Mutton 14 stones, Pork 48 stones, other foods 52 stones.

Urban Districts.

5. Alnwick	...	Beef 1 carcase.
6. Amble	...	Beef 5 stones 5 lbs., Pork 5 lbs.
7. Ashington	...	Beef 392 stones, Mutton 2 carcasses, Pork 39 stones, and a large quantity of internal organs.
8. Bedlington	...	Beef 124 stones, Mutton 8 stones, Pork 5 stones, and a quantity of internal organs.
9. Gosforth	...	Beef 27 stones, Fruit 2 lbs.
10. Hexham	...	Beef 288 stones, Mutton 5 stones, Pork 36½ stones.
11. Longbenton...	...	Beef 310 stones, Mutton 9 stones, Fruit 280 lbs., Butter 56 lbs., Tea 560 lbs., Cereals 224 lbs., Sugar 28 lbs., Lemon Peel 98 lbs.
12. Newbiggin-by-Sea	...	Nil.
13. Newburn	...	Beef 164 stones, Mutton ½-stone, Pork 26 stones.
14. Prudhoe	...	Beef 25 stones, Pork 14 stones.
15. Seaton Valley	...	Beef 248 stones, Mutton 7 stones, Pork 19 stones.
16. Whitley & Monkseaton	...	A total weight of 8,532½ lbs. of meat foods, including Beef, Veal, Mutton, Pork (and a large quantity of internal organs too numerous to tabulate here).

Rural Districts.

17. Alnwick	...	Meat 70 stones.
18. Belford	...	Nil.
19. Bellingham	...	Nil.
20. Castle Ward	...	Nil.
21. Glendale	...	Nil.
22. Haltwhistle	...	Nil.
23. Hexham	...	Beef 122 stones, Mutton 9 stones, Pork 24 stones.
24. Morpeth	...	Beef 60 stones, Mutton 12 stones, Organs and offals 35 stones.
25. Norham and Islands	...	Nil.
26. Rothbury	...	Nil.

SALE OF FOOD AND DRUGS ACTS.

The County Council is the administrative authority under the above Acts throughout the administrative County, excepting in the area of the Borough of Berwick-upon-Tweed. Samples for examination by the County Analyst are taken by the County Council's Inspectors of Weights and Measures. The results of the analyses of samples taken during 1938 and the percentages of those found to be adulterated are shown in the subjoined table.

The figures given do not include 695 milk samples which were taken and tested during the year by the County Council's Inspectors of Weights and Measures, but which were not submitted to the County Analyst.

Description of Article.	Number Examined.	Number Adulterated, etc.	Percentage of Samples Adulterated.	Vendor Prosecuted.	Convic- tions including cases dis- missed on payment of costs.
Ale	1	...	...	...	...
Ale, Mild	4	...	...	...	...
Almonds, Ground	18	...	...	...	...
Apricots, Dried... ..	3	...	...	...	...
Apella (Apple Juice)	1	...	...	...	...
Arrowroot	1	...	...	...	...
Bacon	9	...	...	...	...
Baking Powder... ..	10	...	...	...	...
Barley, Pearl	1	...	...	...	...
Beef, Luncheon... ..	1	...	...	...	...
„ Pressed	1	...	...	...	...
„ Suet	6	1	16.6	...	...
„ Suet, Shredded with White Flour	2	...	...	...	...
„ Suet, Shredded with Rice Flour	2	...	...	...	...
Beer	11	...	...	...	...
Bi-carbonate of Soda	1	...	...	...	...
Black Pudding	6	...	...	...	...
Bread	5	...	...	...	...
Butter	26	...	...	...	...
Camphorated Oil	2	...	...	...	...
Cheese	6	...	...	...	...
„ Cheshire	11	1	9	...	...
„ Cheshire style... ..	1	...	...	...	...
„ Dutch Cheshire	2	...	...	...	...
„ Cheddar	13	4	31	...	...
„ Cream	1	...	...	...	...
Chicken, Ham and Tongue Paste	1	...	...	...	...
Chocolate Eclair	2	1	50	1	1
„ Swiss Roll	1	1	100	...	...
„ Fingers	1	...	...	...	...
„ Melba	1	...	...	...	...
„ Roll	1	1	100	...	...
„ Swiss Roll Powder... ..	1	...	...	...	...
Cinnamon	1	...	...	...	...
Cocoa	12	...	...	...	...
Cocoanut Dessicated	1	...	...	...	...
Cod Liver Oil	1	...	...	...	...
Carried forward ...	168	9	—	1	1

Description of Article.	Number Examined.	Number Adulterated, etc.	Percentage of Samples Adulterated.	Vendor Prosecuted.	Convic- tions including cases dis- missed on payment of costs.
Brought forward ...	168	9	—	1	1
Coffee	14	2	14.3	1	1
Coffee and Chicory	4	...	...	...	...
Cookies, Fresh Cream	2	...	...	...	...
Corned Beef	4	...	...	...	...
Cornflour	7	1	14.3	...	...
Crab Paste	1	...	...	...	...
Cream	4	3	75	1	1
„ Fresh	4	3	75	...	...
„ Strawberry	1	1	100	...	...
„ Tinned	4	...	...	...	...
Cream of Tartar	2	...	...	...	...
Currants	3	...	...	...	...
Curry Powder	3	...	...	...	...
Custard Powder	14	...	...	...	...
Dripping... ..	4	...	...	...	...
Farola	1	...	...	...	...
Fat, Cooking	1	...	...	...	...
Flour	1	...	...	...	...
Gelatine	2	...	...	...	...
Ginger Sponge Mixture	1	...	...	...	...
Glycerine	2	...	...	...	...
Grape Fruit Juice	1	1	100	1	1
Gregory Powder	1	...	...	...	...
Ground Ginger	9	...	...	...	...
Ham, Cooked	2	...	...	...	...
Ham Roll	1	...	...	...	...
Ham and Tongue Paste	1	...	...	...	...
Honey, Pure	1	...	...	...	...
Ice Cream	2	...	...	...	...
Jam	19	3	15.8	...	...
Jelly, Apple	1	...	...	...	...
„ Crystals	1	...	...	...	...
Lemon Peel	1	...	...	...	...
Lard Compound	3	...	...	...	...
„	21	1	4.7	...	...
Lemonade	2	...	...	...	...
Lemon Dessert Confectionery... ..	1	...	...	...	...
Linseed, Crushed	1	...	...	...	...
Loganberries	1	...	...	...	...
Lemonade Powder	1	...	...	...	...
Lemon Curd	2	...	...	...	...
„ Cheese	2	...	...	...	...
„ Chocolate Lentils	1	...	...	...	...
Margarine	16	...	...	...	...
Marmalade	3	...	...	...	...
Meat, Minced	1	...	...	...	...
„ Potted	6	...	...	...	...
Milk	103	50	48.5	8	7
„ Condensed	41	...	...	...	...
„ Dried	1	...	...	...	...
Carried forward ...	493	74	—	12	11

Description of Article.	Number Examined.	Number Adulterated, etc.	Percentage of Samples Adulterated.	Vendor Prosecuted.	Convic- tions including cases dis- missed on payment of costs.
Brought forward ...	493	74	—	12	11
Milk, Malted	1	...	...	...	...
Mincemeat	2	...	...	...	...
Mustard	5	...	...	...	...
Marmalade, Grape Fruit ...	1	1	100	...	...
Nitre, Sweet Spirits of ...	1	...	...	...	...
Nut Marzipan (almond flavour)	2	...	...	...	...
Oatmeal	6	...	...	...	...
Olive Oil... ..	3	...	...	...	...
Orange Curd	1	...	...	...	...
Orange Juice	4	4	100	1	1
Paregoric	1	...	...	...	...
Peas	1	...	...	...	...
„ Dried	1	...	...	...	...
„ Tinned	3	...	...	...	...
Pease Pudding	1	...	...	...	...
Peel, Mixed	1	...	...	...	...
Pepper	10	...	...	...	...
„ Black	1	...	...	...	...
„ White	21	...	...	...	...
Pickles	1	...	...	...	...
Prunes	3	...	...	...	...
Raisins,	2	...	...	...	...
„ Seedless	1	...	...	...	...
Rhubarb, Compound Tincture	1	...	...	...	...
Rice	5	...	...	...	...
„ Flaked	1	...	...	...	...
„ Ground	6	...	...	...	...
Salts, Glauber	1	...	...	...	...
Sauce	1	...	...	...	...
„ Chutney	1	...	...	...	...
„ Tomato	2	...	...	...	...
Sausage, Beef	11	...	...	...	...
„ Luncheon	2	...	...	...	...
„ Pork	9	...	...	...	...
Self-raising Flour	4	...	...	...	...
Semolina... ..	4	...	...	...	...
Steak and Kidney Pudding ...	1	...	...	...	...
Sugar	4	...	...	...	...
„ Brown	1	...	...	...	...
„ Demerara	6	...	...	...	...
Syrup, Golden	2	...	...	...	...
Soup Powder, Mulligatawny ...	1	...	...	...	...
Spice, Mixed	1	...	...	...	...
Sugar, Moist	1	...	...	...	...
Sultanas	1	...	...	...	...
Sausage	15	3	20	...	...
Table Jelly	2	...	...	...	...
Tapioca	2	...	...	...	...
Tartaric Acid	1	...	...	...	...
Carried forward ...	652	82	—	13	12

Description of Article.	Number Examined.	Number Adulterated, etc.	Percentage of Samples Adulterated.	Vendor Prosecuted.	Convictions including cases dismissed on payment of costs.
Brought forward ...	652	82	—	13	12
Tea	13	...	...	...	...
Toffee	1	...	...	...	...
Tomatoe Ketchup	2	...	...	...	...
„ Paste	2	...	...	...	...
Tongue, Lunch	1	...	...	...	...
Tripe	1	...	...	...	...
Veal, Jellied	2	...	...	...	...
„ Ham and Tongue Roll... ..	3	...	...	...	...
Vinegar, Malt	15	...	...	...	...
„ Table	6	4	66.6	...	...
Veal, Ham and Egg	1	...	...	...	...
Whisky	1	...	...	...	...
White Precipitate Ointment	1	1	100	...	...
„ Pudding	5	...	...	...	...
Wine, Fruit	1	1	100	...	...
Yeast	3	...	...	...	...
Yorkshire Relish	1	...	...	...	...
	711	88	8.36	13	12

Public Health (Condensed Milk Regulations), 1923 and 1927; Public Health (Dried Milk Regulations), 1923 and 1927; Public Health (Preservatives, etc., in Food Regulations), 1925-1927—

All samples liable to contain preservatives were tested in the usual way for preservatives; in one case a defendant was fined for the sale of cream containing boric acid.

Berwick-upon-Tweed.—The following table indicates particulars of samples taken and results of analyses, etc., during the year. Forty-two samples of various foods and drugs were taken and examined by the Public Analyst, as under :—

	Number taken.	Genuine.	Non-genuine.
Milk	29	25	4
Butter	2	2	—
Margarine	2	2	—
Lard	1	1	—
Malt Vinegar	1	1	—
Flour	1	1	—
White Pepper	1	1	—
Cocoa	1	1	—
Ground Rice	1	1	—
Custard Powder	1	1	—
Self-raising Flour... ..	1	1	—
Chicken and Ham Paste	1	1	—
Totals	42	38	4

("C" by Local Authority
{	"D" by other persons.

* Ceased to function as separate Authorities.

All samples which might possibly have contained preservatives were examined for such, those reported genuine either contained none, or, if permitted to contain preservative, they contained it in a quantity within that permitted.

It will be observed that all samples other than milk samples were reported "genuine." Of the 29 samples, 4 or 13.8% were not up to standard. This is a low percentage. In the 4 non-genuine samples, deficiency in milk-fat was due to "appeal to the cow."

SEWERAGE AND SEWAGE DISPOSAL.

Ashington (Urban).—An extension of new sewer (1,700 yards) was made at a cost of £5,000.

Gosforth (Urban).—An extension of 1,218 yards of sewer was made.

Newbiggin-by-the-Sea (Urban).—A scheme is in hand for the resewering of North Seaton Colliery.

Whitley and Monkseaton (Urban).—Over 2,200 yards of new sewer were laid.

Alnwick (Rural).—A commencement was made with the improvements to the sewerage at Felton.

Castle Ward (Rural).—A scheme for new sewage disposal works for *Dinnington Colliery* was prepared in 1937 and had progressed as far as the acceptance of tenders, when a hitch occurred in regard to the site of the proposed works. Considerable delay occurred before a new site was secured and the process of Inquiry, tenders, etc., gone over again. This was finally accomplished and the work is now to proceed.

Capheaton.—A new sewer, with suitable disposal works was installed. A scheme was also instituted for dealing with the sewage from the Ridge estate. It included detritus tank, settling tanks, and percolating filter with revolving distributor, and is expected to be completed shortly.

Haltwhistle (Rural).—The new sewage disposal works for the town of Haltwhistle are now in operation and working very satisfactorily. New sewerage schemes are proposed for several of the outlying villages.

Hexham (Rural).—The new sewer at Slaley was brought into operation.

Morpeth (Rural).—Sewerage schemes are proposed for Longhorsley, Hepscoth and Ulgham.

Norham and Islandshires (Rural).—A new scheme is planned for Holy Island, and extensions are intended at Norham.

HOUSING.

The number of houses erected in the County during the year under review was 3,994. Of this number, nearly one-half, i.e., 1,911 were erected by local authorities.

The largest contributions in this direction were—Seaton Valley Urban 352, Morpeth Borough 265, Blyth Borough 186, and Berwick Borough 178. The total post-war additions to the housing of the population has now reached the respectable total of 37,655.

Table A (Housing) shown on opposite page, shows details as to how this total has been attained.

Columns A and B show "State assisted" and "unassisted" houses respectively, whilst lines C and D show respectively those erected by local authorities, and by private persons.

Of the gross total of 37,655 it will be seen that local authorities have been responsible for nearly 40%, i.e., 14,863.

State assistance was accorded in the building of 17,435 houses (viz., to local authorities 13,121 and to private persons 4,314); unassisted private enterprise added 18,478 houses to the grand aggregate.

The districts in which the largest additions have been made to the sum total are :—Wallsend Borough 4,426, Whitley and Monkseaton Urban 4,022, Longbenton Urban 3,254, Blyth Borough 2,902, Seaton Valley Urban 2,773, Gosforth Urban 2,750, Newburn Urban 2,199, Castle Ward Rural 2,036, Bedlingtonshire Urban 1,961, Ashington Urban 1,793, Morpeth Rural 1,276, and Berwick Borough 1,101.

Amongst municipal schemes for housing the largest contributors (over 1,000) were :—Wallsend Borough 2,179, Seaton Valley 1,685, Blyth Borough 1,653, Newburn 1,337, Bedlingtonshire 1,010, whilst the lowest additions in this direction were Belford Rural 6, Bellingham Rural 19, and Amble Urban and Rothbury Rural with 36 each.

The grand aggregate of 37,655 houses, all of modern type, with more hygienic amenities cannot but be of high value in regard to the health of the people.

WATER SUPPLIES.

Alnwick (Urban).—A scheme is proposed for increasing the town's supply.

Newbiggin-by-the-Sea (Urban).—New services were provided for 139 houses.

Alnwick (Rural).—A scheme was put into operation for supplying the villages of Felton, Acklington and Togston. Schemes were also put in hand for improving the supplies to Alnmouth and Shilbottle.

Castle Ward (Rural).—A new supply for Heddon-on-the-Wall was brought into operation. Pumped from a deep borehole into a large storage tank the water gravitates to the whole of the village.

Glendale (Rural).—A new supply for the village of Millfield was inaugurated.

Haltwhistle (Rural).—An extension of 800 yards of main was made at Gilsland. The scheme for a new town's supply had not been commenced at the end of the year.

Hexham (Rural).—Extensions of services were made at Allendale, Acomb, Corbridge, Broomley, Haydon Bridge, Ovingham and Wylam.

Morpeth (Rural).—Extension of supplies was made at Lynemouth and Widdrington. Improvements were made to the reservoir at Hebron. The supply at Longhorsley is reported to be unsatisfactory.

Norham and Islandshires (Rural).—Extensions are proposed to the supplies at Norham and Horncliffe, and a comprehensive scheme is proposed for a new supply to Holy Island to supersede the present supply from the Popple Well which is all hand drawn.

HOSPITALS.

Isolation Hospitals.

The amount of hospital accommodation available for the isolation of infectious disease was as indicated in the subjoined table. The population of the 25 Sanitary Districts for which isolation hospital accommodation was provided was 396,982, and the beds provided numbered 568, independently of the accommodation at port hospitals, giving one bed for each 706 of population.

During the year the Wallsend Infectious Diseases Hospital was brought under the administration of the Earsdon Joint Hospital Board.

Newbiggin-by-the-Sea is the only district in the county without means for isolating cases of infectious disease, cases from this district being sent to the Newcastle upon Tyne Corporation and Morpeth R.D.C. Hospitals.

	Popula- tion served.	Number and kind of hospitals provided.	Beds provided for		
			Small- pox.	Infectious diseases other than Small-pox	Small-pox or other Infectious diseases.
I. JOINT HOSPITAL DISTRICTS.					
(1) <i>Earsdon Joint Hospital District—</i>					
Seaton Valley U.D. ..	120,350	Iron buildings :—	18	...	...
Longbenton U.D. ...		At Earsdon Grange (1)			
Whitley & Monkseaton U.D. ...		Two permanent brick buildings and			
Wallsend Borough ...		† One iron building			
		At Scaffold Hill (1)	...	74	...
		Permanent building	...	86	...
(2) <i>Gosforth, Newburn, and Castle Ward Joint Hos- pital District—</i>					
Gosforth U.D. ...	52,320	Permanent building ...	...	32	...
Newburn U.D. ...					
Castle Ward R.D. ...					
(3) <i>The urban and rural dis- tricts of Alnwick and Rothbury and the rural district of Belford—</i>					
Alnwick U.D. ...	29,340	Iron and wood building	18	...	...
Alnwick R.D. ...					
Belford R.D. ...					
Rothbury R.D. ...					
(4) <i>Hexham rural and Prudhoe—</i>					
Prudhoe U.D. ...	28,408	do. ...	12	12	...
Hexham R.D. ...					
(5) <i>Longtown and Border—</i>					
Alston, etc., R.D. ...	*7,824	do. ...	...	16	...
Brampton R.D. ...					
Longtown R.D. ...					
Haltwhistle R.D. ...					

† Now used only in cases of emergency.

* In this County.

	Popula- tion served.	Number and kind of hospitals provided.	Beds provided for		
			Small- pox.	Infectious diseases other than Small-pox	Small-pox or other Infectious diseases.
II. HOSPITALS PROVIDED BY INDIVIDUAL SANITARY AUTHORITIES.					
Berwick M.B.	12,060	{ One wooden building	4	...	...
Blyth M.B.	34,470	{ Iron & wood building	...	36	...
Morpeth M.B.	9,552	Permanent building ...	8	20	...
		{ Iron building ...	4	...	...
		{ Brick building ...	...	24	...
Wallsend M.B.	43,970	Permanent building ...	24	...	...
Alnwick U.D.	6,875	Permanent building ...	...	17	...
Amble U.D.	4,323	Iron building ...	4	...	...
Ashington U.D.	29,870	{ Iron building }	...	43	...
		{ Brick building }	...	...	...
Bedlingtonshire U.D. ...	27,310	Iron & brick building	...	26	...
Gosforth U.D....	20,270	Permanent building ...	10	...	...
Hexham U.D.	9,057	Two iron and wood buildings	...	...	30
Glendale R.D.	7,385	Two cottages ...	...	...	8
Morpeth R.D.	15,310	One iron and wood hospital	24	...	...
Norham and Island- shires R.D.	4,556	do. ...	4	...	...
Rothbury R.D....	5,561	Iron and wood building	...	8	...
River Blyth Port Health Authority		Permanent building ...	...	24	...

	Popula- tion served.	Number and kind of hospitals provided.
III. SANITARY AUTHORITIES HAVING MADE ARRANGE- MENTS FOR PATIENTS TO BE RECEIVED BY NEIGHBOURING SANIT- ARY AUTHORITIES.		
Blyth U.D.	34,470	Patients from this district are received into the hospital of the Blyth Port Health Authority.
Bedlingtonshire U.D.	27,310	Arrangements made with Earsdon Joint Hospital for admission of Smallpox patients.
Alnwick R.D.	12,140	Patients suffering from infectious disease, other than Smallpox, admitted to Alnwick U.D. Hospital.
Belford R.D.	4,764	Arrangements made with Berwick Borough Council for admission of patients to Berwick Infectious Diseases Hospital.
Bellingham R.D. ...	4,847	Patients from this district are received into the Gosforth, Newburn and Castle Ward Joint Hospital.
Castle Ward R.D.	12,680	Smallpox cases are received into the Gosforth U.D. Smallpox Hospital.
Norham and Island- shires R.D.	4,556	Cases of infectious disease, other than Smallpox, are removed, when occasion requires, to Berwick Borough Infectious Diseases Hospital under an agreement with the Borough Council.
River Tyne Port Health Authority		All "Port" cases of infectious disease are received into the Walkergate and North and South Shields Infectious Diseases Hospitals.

*Scheme for the provision of Adequate Hospital Accommodation
for the Treatment of Infectious Disease.*

The provisions of the Scheme adopted by the County Council in 1935 in respect of the above was outlined in the Annual Report for that year.

During the year under review, the districts forming No. 1 Area under parts I and II of the scheme, viz. :—

Berwick-upon-Tweed Borough.
Alnwick Urban District.
Alnwick Rural District.
Amble Urban District.
Belford Rural District.
Norham and Islandshires Rural District.
Glendale Rural District.
Rothbury Rural District.

took preliminary steps with regard to the provision of adequate hospital accommodation for the area, with the result that the North Northumberland Joint Hospital Board Order, 1938, constituting the Board, was made by the Ministry of Health for the purpose of implementing the County Council's Scheme, the appointed day being January 1st, 1939.

Institution Hospitals.

The following table indicates the various Institution Hospitals maintained by the County Council under the Poor Law Act, 1930, and the number of beds available in each during the year 1938.

In the case of the Preston Hospital, North Shields, the total number of the beds in the hospital is shewn, as it is not possible to give the exact number occupied by County Council patients during the year.

Name of Institution.	General, Medical, and Surgical.		Chil- dren.	Chronic Sick.		Venereal.		Tuberculosis.		Isolation.		Mater- nity.	Mental.		Mental Defectives.		Total.	
	M. F.			M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.
Alnwick ...	...	...	3	15	17	...	...	1	...	...	2	1	...	...	...	16	23	39
Berwick-on-Tweed	...	...	4	19	15	...	...	...	...	...	...	1	...	10	...	19	30	49
Greenholm, Halt- whistle (closed 31/3/38)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38	...	...	38
Dean Street House, Hexham ...	31	30	8	...	...	...	...	6	...	...	...	2	...	...	...	37	40	\$77
Morpeth ...	...	...	...	8	6	...	...	...	...	...	...	1	...	...	...	8	7	15
Ponteland...	13	14	2	...	...	...	...	...	2	2	...	...	...	...	...	15	18	\$33
Rothbury...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	51	51
Preston Hospital, North Shields ...	84	81	†95	58	28	6	4	40	26	...	...	12	2	2	...	190	248	438
TOTALS ...	128	125	112	100	66	6	4	47	26	2	4	17	2	12	38	51	417	740

† Includes children. † Includes 25 beds for Tuberculosis cases. § Includes Chronic Sick.

Voluntary Hospitals.

The number of beds available in Voluntary Hospitals in the administrative county during the year 1938, was as follows :—

Alnwick Infirmary	...	...	...	26 (including 2 cots).
Ashington Hospital	...	...	...	44 (including 2 cots).
Berwick Infirmary	...	...	...	36 (including 3 cots).
Blyth Hospital	...	...	...	36 (including 9 cots).
Corbridge Hospital	...	...	...	18
Haltwhistle Hospital	...	...	...	18 (including 2 cots).
Hexham War Memorial Hospital	...	...	...	40
Morpeth Cottage Hospital	...	...	...	13
Rothbury Cottage Hospital	...	...	...	17
Newburn Cottage Hospital	...	...	...	12
Wallsend Infirmary	...	...	...	22 (including 3 cots).
				282

There were 978 beds available during the year, in the various voluntary Hospitals in Newcastle upon Tyne, to which County patients are admitted; the following table shews the approximate number of beds in each :—

Royal Victoria Infirmary	(approximately)...	624 (plus 86 in paybed section, 100 in Castle Hill Convalescent Home, Wylam, and 25 convalescent beds at Riding Mill.
Fleming Memorial Hospital	...	88 (including 12 tonsil beds).
Princess Mary Maternity Hospital	...	86
Northern Women's Hospital	...	28
Eye Hospital	...	35
Throat, Nose and Ear Hospital	...	35

The percentage proportion of beds occupied throughout the year by each of the areas from which patients are admitted to the Royal Victoria Infirmary, was as follows :—

	In-patients.
Durham County	48·00%
Northumberland	31·25%
City of Newcastle	19·11%
Other places	1·64%

and the number of patients admitted from the Administrative County of Northumberland during the year was 4,659, the total number of admissions to the Infirmary being 14,900. The analysis of the waiting list on December 31st, 1938, shews the following results :—

Durham County	1,942
Northumberland County	1,290
City of Newcastle	900
County Borough of Gateshead	613
County Borough of South Shields	128
County Borough of Tynemouth	38

PUBLIC ASSISTANCE.

The system for the payment of District Medical Officers, which was adopted during 1937 and which was fully reported upon in my Annual Report for that year, remained in operation during the year 1938.

POOR LAW MEDICAL OUT-RELIEF.

The following table indicates the various Medical Out-relief districts in the County :—

Guardians Committee Area.	District.	Area in Acres.	Population—1931 Census.
North No. 1	Belford—West	25,877	2,112
	Do. East	13,920	2,502
	Berwick...	14,111	13,181
	Norhamshire	20,151	2,228
	Islandshire	19,186	1,808
	Carham	13,068	889
	Chatton	36,269	1,529
	Ford	23,236	1,745
	Glendale—Southern	21,994	571
	Lowick	12,879	877
	Wooler	40,484	2,443
		241,175	29,885
	<i>Plea piece common to E. & W. Lilburn, Ilderton & Roseden C.Ps.</i>	3	...
	<i>Undivided moor common to Kirknewton & Lanton, C.Ps.</i>	8	...
		241,186	29,885
North No. 2	Alnwick	4,778	6,883
	Embleton	20,200	2,375
	Felton	9,026	1,171
	Glanton	27,021	1,468
	Lesbury	10,645	2,368
	Shilbottle	15,526	1,704
	Warkworth	11,875	7,733
	Rothbury—East	28,601	2,102
	Do. West	19,477	1,398
	Rothley	15,097	258
	Harbottle	59,553	777
	Elsdon	18,931	383
	Whittingham	26,204	850
		266,934	29,470
	<i>Intermixed lands common to Rothbury & Snitter, C.P.</i>	23	...
		266,957	29,470
Central	Ponteland	42,948	8,174
	Stamfordham	30,254	2,788
	Stannington	10,314	1,920
	<i>Carried forward</i>	83,516	12,882
		508,143	59,355

Guardians Committee Area.	District.	Area in Acres.		Population— 1931 Census.	
	<i>Brought forward...</i>	83,516	508,143	12,882	59,355
Central— <i>Contd.</i>	Morpeth — No. 1	327		7,391	
	Do. No. 2	11,745		4,806	
	Do. No. 2a	2,620		9,863	
	Do. No. 3	10,123		27,799	
	Do. No. 4	15,776		4,787	
	Do. No. 5	17,087		820	
	Do. No. 6	676		19,623	
	Do. No. 6a	8,881		12,095	
	Do. No. 7	4,573		258	
	Do. No. 8	16,127		2,307	
	Do. No. 9	9,607		521	
	Blyth ...	4,319		31,680	
		185,377		134,832	
	<i>Longhorsley Common common to Bigge's, Riddells, and Freeholders' Qtrs. C.Ps. ...</i>	23		...	
	<i>Horsley Moor common to Bigge's Qtr., Fenrother Freeholders and Riddell's Qtrs. C.Ps. ...</i>	192		...	
			185,592		134,832
South ...	Gosforth ...	1,303		18,044	
	Whitley ...	1,925		24,228	
	Seaton Delaval ...	4,102		5,842	
	Seghill ...	1,425		2,582	
	Cramlington ...	4,583		8,238	
	Earsdon ...	5,705		13,606	
	North Longbenton	4,585		12,940	
	Weetslade ...	2,201		7,734	
	Wallsend ...	1,629	(approx.)	29,725	
	Willington Quay	1,793	do.	14,862	
			29,251		137,801
West ...	Bellingham—No. 1	19,719		1,287	
	Do. No. 2	104,787		820	
	Do. No. 3	58,369		873	
	Do. No. 4	13,228		756	
	Do. No. 5	30,518		956	
	Do. No. 6	20,024		599	
	Lemington ...	1,588		8,599	
	Newburn ...	2,808		10,362	
	Haltwhistle—				
	Eastern ...	34,103		5,823	
	Western ...	27,461		2,390	
	Southern ...	22,282		419	
	<i>Carried forward...</i>	334,887	722,986	32,884	331,988

Guardians Committee Area.	District.	Area in Acres.		Population— 1931 Census.	
	<i>Brought forward...</i>	334,887	722,986	32,884	331,988
West—Contd.	Whitfield ...	12,481		278	
	Hexham ...	12,203		10,290	
	Slaley ...	27,001		1,409	
	Shotley ...	15,244		1,129	
	Blanchland ...	11,184		331	
	Humshaugh ...	37,597		2,802	
	Haydon... ..	22,031		2,954	
	Allendale ...	9,631		1,475	
	Wylam ...	5,495		11,165	
	Ovingham ...	10,508		2,825	
	Corbridge ...	22,211		3,936	
	Allenheads ...	4,748		743	
	Ninebanks ...	4,987		394	
		530,208		72,615	
	<i>Allendale Common —stinted pasture common to Allen- dale and West Allen C.Ps. ...</i>	18,107		...	
	<i>Moorland common to Townships of ancient Parish of Hexham (viz., Hexham and Hex- hamshire High, Low, Middle and West Quarters) ...</i>	4,903		...	
			553,218		72,615
			1,276,204		404,603
	<i>Newcastle-on-Tyne R.D. (Moothall and precincts) ...</i>		1		5
			1,276,205		404,608

PUBLIC VACCINATION.

A list of Public Vaccinators and of the Vaccination Officers in the County will be found at the commencement of this report.

The accompanying table is a return relating to the year ended December 31st, 1937, and includes (last two columns) information relating to the year 1938.

There are in some areas of the County defaulting parents who have not obtained exemption on conscientious grounds, etc. It is the duty of Vaccination Officers to prosecute such persons, but proceedings have not been taken in any of the cases concerned.

Registration Sub-districts.	No. of Births returned in the "Birth List Sheets" as registered from 1st January to 31st December, 1937.	Number of these Births duly entered by 31st January, 1939, in Columns I., II., IV. and V. of the "Vaccination Register" (Birth List Sheets), viz. :—				Number of these Births which on 31st January, 1939, remained unentered in the "Vaccination Register" on account (as shown by "Report Book") of			No. of these Births remaining on 31/1/39 neither duly entered in the "Vaccination Register" (Cols. 3, 4, 5, 6 and 7 of this return) nor temporarily accounted for in the "Report Book" (Cols. 8, 9 and 10 of this return).	Total No. of Certificates of successful Primary Vaccination of Children under 14 received during the calendar year 1938.	No. of Statutory Declarations of Conscientious objection actually received by the Vaccination Officers irrespective of the dates of birth of the children to which they relate during the calendar year 1938.
		Col. I. Successfully vaccinated.	Col. II.		Col. IV. No. in respect of whom Statutory Declarations of conscientious objection have been received.	Col. V. Died unvaccinated.	Postponement by Medical Certificate.	Removal to Districts the Vaccination Officers of which have been duly appraised.	Removal to places to unknown or which cannot be reached and cases not having been found.		
		3	Insusceptible of vaccination.	Had Small-pox.	6	7	8	9	10	12	13
1	2		4	5							
Allendale	35	11	1	...	15	4	...	...	1	8	11
Alnwick	96	16	1	...	73	2	...	2	2	13	57
Ashington (East)	107	5	1	...	79	3	...	...	2	20	285
Ashington (West)	659	70	1	...	482	28	8	4	10	58	216
Bedlington	474	89	...	...	345	22	4	7	...	79	284
Belford	64	54	...	...	9	...	...	...	1	62	2
Glendale	80	74	...	...	5	1	...	...	...	52	2
Bellingham	62	32	...	...	11	7	...	...	2	25	8
Berwick	236	90	2	...	101	11	3	6	7	92	103
Bywell	139	22	...	...	101	7	...	...	4	18	130
Castle Ward	116	35	...	...	69	6	...	1	1	71	7
Stamfordham	20	2	...	...	13	...	...	1	...	1	11
Chollerton	43	21	...	...	18	...	...	...	...	23	10
Embleton	62	24	...	...	32	...	...	...	...	18	71
Haltwhistle	87	5	...	...	70	...	...	...	...	3	10
Hexham	311	110	1	...	133	...	...	...	1	129	71
Longbenton	558	161	3	...	328	15	9	41	1	199	132
Morpeth	147	27	1	...	63	19	11	5	12	39	324
Newburn	277	68	...	...	173	4	2	7	13	95	61
North'land S.E.1	542	85	...	...	404	27	5	3	12	80	157
North'land S.E.1a	...	...	...	...	...	...	...	...	...	39	287
Seaton Valley	175	60	...	...	107	6	...	...	2	50	131
Seaton Valley	...	...	...	...	...	...	...	...	...	...	114
South	56	10	...	...	41	3	...	...	...	25	118
Rothbury	67	48	1	...	17	...	...	...	...	61	10
Wallsend	950	371	3	...	469	...	4	26	24	360	492
Warkworth	156	7	...	...	123	9	...	2	11	20	122
Whitley	271	61	1	...	147	13	13	1	14	60	98
	5,790	1,558	16	...	3,428	239	70	106	136	1,700	3,314

VENEREAL DISEASE REGULATIONS.

The treatment centre provided by the County Council for County patients, under the scheme undertaken by the County Council in conjunction with the neighbouring Authorities of the County Borough Councils of Gateshead and Newcastle upon Tyne, is at the clinic of the Joint Committee of the three Councils concerned, which is situate at the Newcastle General Hospital, this having been opened on August 30th, 1937, as indicated in the Annual Report for 1937.

In the following table particulars are given relating to treatment during the year 1938 and (for comparison) during 1937.

With regard to the table for the year 1937, for statistical purposes it was decided, after communication with the Ministry of Health, that the transfer from the Royal Victoria Infirmary to the Joint Committee's Clinic should be regarded as the termination of one Clinic and the commencement of the other; as a consequence of this the figures which would appear under Sections 8 and 9 of the Royal Victoria Infirmary Clinic return are included together under Section 8, which leaves no patients under treatment on the date of transfer; while in the return from the Joint Committee's Clinic, Sections 1, 2 and 4, are included together under Section 4, which means that all previously treated cases are shewn as transferred to the Clinic.

	R.V.I. Newcastle. Jan. 1—Aug. 29. 1937.			Newcastle General Hospital. Aug. 30—Dec. 31. 1937.			1938.		
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
1. Under treatment or observation at beginning of year... ..	231	100	331	...	...	...	284	184	468
2. Returned for treatment after having ceased to attend during any previous year... ..	20	24	44	...	...	...	...	...	...
3. Dealt with for the first time	182	77	259	138	65	203	385	249	634
4. Number of cases dealt with for the first time known to have received treatment at other Centres	16	6	22	259	163	422	40	14	54
5. Discharged after completion of treatment	119	66	185	70	36	106	264	145	409
6. Ceased to attend before completion of treatment	78	31	109	24	2	26	50	22	72
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure... ..	7	3	10	...	1	1	10	4	14
8. Transferred to other Centres, etc.	245	107	352	19	5	24	57	34	91
9. Under treatment or observation at end of year ... ..	...	...	...	284	184	468	328	242	570
10. Cases (included in Item 6) which failed to complete one course of treatment... ..	13	9	22	...	...	...	1	...	1
11. Total number of attendances	4,480	2,285	6,765	2,994	1,818	4,812	13,938	6,906	20,844
12A. Total number of in-patients admitted for treatment during year	4	5	9	8	4	12	27	36	63
12B. Aggregate number of in-patient days of treatment given	70	243	313	183	147	330	924	1,014	1,938
13. Number of cases of congenital syphilis (included in Item 3 above)	8	5	13	3	3	6	8	14	22

Irrigation stations are open, morning and evening, for gonorrhoea patients independently of the Clinics.

The travelling expenses of necessitous patients to and from the Clinics, are borne by the County Council.

Every facility is afforded to medical practitioners in the area for consultations with the Medical Officer of the treatment centre, and they occasionally attend the clinics.

Bacteriological examinations under the Council's scheme were carried out at the County Laboratory, Newburn-on-Tyne, with the exception of a few specimens which were examined at King's College, Newcastle.

The following statement gives the number and kind of tests taken at the respective laboratories during 1938 and indicates the extent to which medical practitioners availed themselves of the facilities provided by the County Council for such examinations :—

Nature of Test.	Number of Tests.		
	For Treatment Centres.	For Hospitals and other Institutions.	For Medical Practitioners.
<i>Microscopical—</i>			
For detection of Spirochetes...	...	...	...
For detection of Gonococci ...	...	...	44
<i>Serum tests—</i>			
For Wassermann reaction	*1,612	†465	254
Flocculation (MKR.II) ...	991	4	...
For Gonococcal infection ...	595	1	13
<i>Cerebro-Spinal fluid tests—</i>			
Wassermann reaction ...	75	63	2
Globulin } ...	73	1	1
Colloidal } ...			
Totals ...	3,346	534	314

* 5 Examined at King's College, Newcastle.

†10 " " "

Patients who do not Complete Treatment.

The following table indicates the percentage of patients who failed to complete treatment during the year. The figures for the year 1937 are also included for comparison :—

		1937.		1938.	
		Male.	Female.	Male.	Female.
Syphilis ...	...	20.2%	13.5%	2.2%	7.0%
Gonorrhœa ...	...	18.5%	10.9%	17.5%	13.7%

In-patients are included in this figure as they attend the out-patients' clinic after their discharge from the ward.

The following table indicates the number of patients who attended the out-patients' clinic during the year :—

					Male.	Female.
Syphilis ...	...	...	...	...	224	213
Gonorrhœa ...	...	...	...	...	314	80

THE ANNUAL REPORT OF THE CLINICAL MEDICAL OFFICER OF THE
JOINT COMMITTEE OF THE COUNTY COUNCILS OF DURHAM AND NORTHUM-
BERLAND AND THE COUNTY BOROUGH COUNCILS OF GATESHEAD
AND NEWCASTLE UPON TYNE, is submitted.

FIRST ANNUAL REPORT OF THE CLINICAL MEDICAL OFFICER.

1.—(a) On the 29th August, 1938, the Joint Committee's Clinic completed its first year of working.

(b) For purposes of convenience the statistics shown in the attached table cover the period 30th August, 1937, to 31st August, 1938.

(c) The summary of the year's work shows a total attendance of over 100,000 which must be regarded as satisfactory. This increase in attendances should not be regarded as necessarily indicating an increased local incidence of the Venereal Diseases, but rather the fuller utilisation of the increased facilities for investigation and treatment.

(d) The monthly figures show certain fluctuations owing to holidays, seasonal employment, etc., in the June male attendances and in the January and June female attendances. The attendances at the Medical Officers' sessions show a remarkably constant level.

(e) The value of the 12 hours intermediate treatment facilities is shown by the increase in male attendances, averaging approximately 123 per day. The female average of approximately 15 per day should be capable of further improvement.

(f) Certain factors, namely the number of "distant" patients, conditions of employment in local patients, etc., make it more difficult for the attendance of women for intermediate treatment.

(g) A certain proportion of female patients, who from the purely medical point of view can be treated as out-patients, would, from the sociological aspect, be greatly benefitted by a period of institutional control and occupational therapy. At the moment few hostel facilities exist for infected pregnant and non-pregnant patients of this type. This constitutes a grave lack, as, apart from complications, such patients are insufficiently employed as hospital in-patients. While the primary object of the Joint Committee's Clinic is the medical treatment of the Venereal Diseases the importance of sociological factors in their control cannot be ignored.

(h) The employment of the Sulphanilamide group of drugs in a limited number of cases (approximately 150) has decreased to some extent the total of intermediate treatments, while its more universal future application will have a marked effect in this direction. Until this form of treatment is completely standardised, the reduction of intermediate treatments is accompanied by an increase in medical officers observation and in the examination of pathological material.

(i) The present turn over of the female department is approximately to capacity as regards staff. Further increase, or the part time services of the Sister in charge in the wards, will necessitate an additional appointment.

2.—The standardisation of shorter and more intensive courses of treatment for early infective syphilis resulted in a marked initial increase in the amount of arsenobenzene preparations used followed by a slow progressive decrease.

3.—Attention is being paid to the investigation and appropriate treatment of the late systemic manifestations of syphilis and neuro-syphilis. For many of the conditions Bismuth is the drug of choice, and for neuro-syphilis, Tryparsamide, while a number of suitable cases are being treated with Hyperpyrexia.

4.—In-patient days totalled 4,120—equivalent to a daily bed average of 11, and a stay per patient of 23 days.

5.—The pathological tests carried out in the investigation and control of treatment of the patients attending totalled 27,466, of which 18,919 were carried out in the Clinic and 8,547 sent to the Laboratory Pathologists.

6.—In view of certain difficulties in getting prescriptions, necessary for the home treatment of distant patients, made up in the hospital dispensary after 5.30 p.m., it was decided to dispense, in the Clinic, routine prescriptions from bulk supplies. This method has proved satisfactory and in the course of the year 2,894 routine prescriptions have been dispensed.

7.—*Teaching* :—

(a) A lecture on the "Early Diagnosis of the Venereal Diseases," in connection with the Intensive Post-graduate course, was given on the 13th July, while a further lecture for the current course has been arranged for the 23rd September, 1938.

(b) The practical clinical instruction of undergraduates is continuing and should be completed by the 29th September, 1938.

(Signed) A. E. W. McLACHLAN,
Clinical Medical Officer.

JOINT COMMITTEE'S CLINIC, NEWCASTLE GENERAL HOSPITAL.

SUMMARY OF WORK DONE IN CLINIC FROM 30TH AUGUST, 1937, TO 31ST AUGUST, 1938.

	New Patients		Attendances at M.O.'s. Sessions		Intermediate Treatments		Syphilis Injections			Pathological work in Clinic		Pathological work in Laboratory		In-Patients
	Male	Female	Male	Female	Male	Female	Arsenic	Bis.	Other Arsenicals	Smears	D.G.'s.	W.R.'s	C.F.T. C.S.F.	
1937														
August (2 days)	16	3	107	19	134	23	...	...	...	11	1	...	...	Males ... 103 Females... 75 Total number of of days—4,120
September ...	200	67	2,387	1,466	2,573	192	...	...	...	491	27	...	...
October ...	159	67	2,546	1,450	3,420	288	...	...	...	682	18	...	...
November ...	179	88	2,579	1,587	3,562	440	...	...	...	1,115	18	...	...
December ...	142	50	2,687	1,367	3,633	487	*3,605	8,944	173	1,297	29	*2,008	656		33
1938														
January ...	149	84	2,798	1,643	3,791	392	...	...	...	1,437	22	...	...	...
February ...	142	88	2,686	1,491	3,774	440	...	...	...	1,478	18	...	...	...
March ...	174	104	3,187	1,820	4,447	650	*2,889	5,556	126	2,029	15	*1,512	582	43
April ...	143	69	2,895	1,541	4,220	560	...	...	...	1,737	25	...	...	...
May ...	129	81	3,029	1,760	4,488	601	...	...	...	1,998	31	...	...	...
June ...	132	76	2,648	1,623	3,443	452	*2,030	4,981	93	1,926	21	*1,498	624	33
July ...	163	86	2,764	1,748	3,758	481	681	1,643	39	2,208	39	517	223	10
August ...	187	70	2,833	1,688	4,032	523	544	1,647	50	2,218	28	534	246	28
	1,915	932	33,146	19,183	45,275	5,529	9,749	22,771	481	18,627	292	6,069	2,331	147

* Quarterly totals.

Total new Registrations,
2,847.

Total attendances—
Males ... 78,421
Females ... 24,712 } 103,133

MATERNITY AND CHILD WELFARE AND MIDWIVES.

MIDWIVES ACTS, 1902-1936.

The year 1938 constituted the first full year of operation of the scheme formulated in accordance with the provisions of the Midwives Act, 1936. The major portion of the domiciliary service of midwives in Northumberland is provided by District Nursing Associations affiliated to the Northumberland County Nursing Association.

An agreement has been entered into between the Northumberland County Council and the Association, the terms of which were included in the annual report for 1937.

District nurse-midwives or midwives, employed by District Nursing Associations, undertake domiciliary midwifery or maternity nursing in all areas of the County except the Borough of Wallsend, the Urban District of Gosforth, and the parishes of Kirkhaugh and Knaresdale. In the latter areas arrangements have been made for the service to be provided by the Nursing Association in Alston, and County midwives are employed in Wallsend and Gosforth.

Under the terms of the agreement the number of certified midwives to be employed by the County Nursing Association is 127, plus such number as may be necessary to provide an adequate service in each of three Registered Districts. A service of Relief Nurses is also maintained to provide for holidays and emergencies such as illness of a midwife or suspension for any reason. At the end of 1938 the number of nurse-midwives on the relief staff was 50.

Training and Salaries.

In accordance with the provisions of the Midwives Training Scheme of the Northumberland County Nursing Association, nurses who receive free midwifery training enter into an agreement with the Association to serve them for a definite period on completion of their training. When the agreement between the County Council and the County Nursing Association was drawn up this period of service in the case of candidates with no previous nursing experience was three years, and in the case of state-registered nurses one year. In view of the extension of the period of training as laid down in the new Rules of Training and Examination of the Central Midwives Board it was decided that the length of service for candidates with no previous experience should be reduced from three to two years.

An arrangement was entered into between the Northumberland County Council and the Northumberland County Nursing Association, that the sum of £80 hitherto considered as the value of emoluments, should be added to the nurse's actual salary and paid in cash, except in those cases where a house was provided by the District Nursing Association, when the sum of £15 should be deducted in lieu of rent. It was also decided that the salary paid to candidates with no previous experience in return for free training should be as follows :—

At the termination of training and whilst under agreement :—

1st year	...	...	...	£135
2nd year	...	...	...	£140

When out of agreement the inclusive salary to be £155 per annum rising by annual increments of £2 10s. 0d. to £170 per annum.

At the same time it was decided that nurses in possession of a general certificate of hospital training but not in possession of the State-Registration Certificate, should in future receive free training on the same terms as candidates with no previous experience.

It was also agreed that state-registered nurses should receive £175 during their year of agreement in return for free midwifery training, and that thereafter they should be paid £200 per annum rising by three annual increments of £10 to £230 per annum.

These alterations in the arrangement with regard to salaries will involve the County Council in a certain amount of additional annual expenditure. but this is felt to be justified in view of the fact that one of the main objects of the Midwives Act, 1936, is to improve the status of the midwifery profession. The Minister of Health has expressed the view that it is important that midwives should be adequately remunerated.

Provisions as to Fees.

The fees to be charged by the County Association and by each of the District Associations are regulated as follows :—

To Members of the County or of a District Association—

Midwifery—Maximum	...	...	...	£1	1	0
Maternity Nursing—Maximum	...	...	...	0	10	6

To Non-Members—

Midwifery—Maximum	...	...	...	£2	2	0
Maternity Nursing—Maximum	...	...	...	1	1	0

Provided that :—

(1) If no maternity benefit is received and the weekly income does not exceed 35/- after deducting rent and rates, the fees charged shall not exceed :

To Members	...	...for Midwifery	...	10/-
		for Maternity Nursing	...	5/-
To Non-Members	...	...for Midwifery	...	15/-
		for Maternity Nursing	...	7/6

(2) No fees shall be charged in respect of cases for which payment is made by the Council's Public Assistance Committee or by any other Public Authority ; and

(3) Reductions in the amount of the fees may be made at the discretion of the County Association or the District Association concerned, where circumstances require, and fees may be wholly remitted where the Association concerned is satisfied that the patient is unable to pay.

(4) Additional charges may be made where the nature of the case or its inaccessibility to visits or the wishes of the patient make whole time nursing necessary or desirable.

Arrangements for Areas not included in the Agreement with the County Nursing Association.

At the beginning of the year five midwives were employed directly by the County Council—four in the Borough of Wallsend, and one in the Urban District of Gosforth. An additional midwife was appointed to Gosforth in August. These midwives attended 344 cases as midwife, and 90 cases as maternity nurse, during the year.

The scale of fees adopted for these areas is as follows :—

Midwifery—Maximum	...	...	...	£2	2	0
Maternity Nursing—Maximum	...	...	...	£1	1	0

Remission is granted on the following scale :—

Remission of Fees.

Income, after deducting rent and rates.	Number in family dependent on income, exclusive of the child.						
	2	3	4	5	6	7	8
	Proportion of fee to be charged :						
	ths	ths	ths	ths	ths	ths	ths
Not over 30/- ...	2/5	1/5	—	—	—	—	—
Do. 35/- ...	3/5	2/5	1/5	—	—	—	—
Do. 40/- ...	4/5	3/5	2/5	1/5	—	—	—
Do. 45/- ...	Whole	4/5	3/5	2/5	1/5	—	—
Do. 50/- ...	Whole	Whole	4/5	3/5	2/5	1/5	—
Do. 55/- ...	Whole	Whole	Whole	4/5	3/5	2/5	1/5
Do. 60/- ...	Whole	Whole	Whole	Whole	4/5	3/5	2/5
Do. 65/- ...	Whole	Whole	Whole	Whole	Whole	4/5	3/5
Do. 70/- ...	Whole	Whole	Whole	Whole	Whole	Whole	4/5

Midwives Employed in Institutions.

At the end of 1938 a total of thirteen midwives was employed on the staff of the Maternity Hospitals at Willington Quay and Corbridge and the War Memorial Hospital, Haltwhistle. In addition there were five midwives employed in Public Assistance Institutions, and four at the Maternity Hospital, The Green, Wallsend.

Midwives Engaged in Independent Practice.

At the end of 1938 there were 16 midwives engaged in independent practice in the County including two who are employed in a registered nursing home. In addition there were 25 emergency nurse-midwives employed on short period holiday duty.

During the year 34 midwives left the County and three voluntarily surrendered their Certificates and claimed compensation.

Inspection of Midwives.

The total number of visits of Inspection made by Inspectors of Midwives and Assistants was 1,256.

Cases attended by Midwives in the Homes.

A.—Employed by Northumberland County Nursing Association.

Total number of births attended.	Midwife.	Maternity Nurse.
4,722	1,673	3,049

B.—Employed by County Council.

Total number of births attended.	Midwife.	Maternity Nurse.
434	344	90

C.—Others—i.e., midwives practising independently and those employed in registered maternity homes.

Total number of births attended.	Midwife.	Maternity Nurse.
429	248	181

Requests by Midwives for Medical Aid.

A midwife is required by the Rules of the Central Midwives Board to send for medical aid in all cases of illness of the patient or child, or of any abnormality occurring during pregnancy, labour or lying-in. A copy of the medical aid form must be sent to the Local Supervising Authority.

In the 2,265 cases attended by midwives there were 464 notices that such attendance by a doctor was necessary.

Claims for Fees.

Under the Midwives Acts, 1918-1936, it is a statutory obligation upon Local Supervising Authorities to pay the fees of medical practitioners called in by midwives in the emergencies defined by the Rules of the Central Midwives Board. The fees paid are in accordance with a scale laid down by the Ministry of Health in the Medical Practitioners (Fees) Regulations, 1936, and it is a condition of payment that the practitioner shall submit his claim within two months from the date on which he was called in (Midwives Act, 1926, sec. 2 (2)). The County Council is empowered to recover from the patient or those responsible for her the whole amount or such proportion of it as the financial circumstances appear to justify. Assessment of the amount to be paid is made in accordance with the income scale which is in operation for the recovery of fees for the services of a midwife or maternity nurse, and which is set out in detail in the section dealing with that subject.

During the year, the total fees paid to doctors amounted to £564 1s. 3d., of which £131 17s. 7d. was afterwards recovered from the patients.

Training of Midwives.

In accordance with the recommendations contained in Circular 559 of the Ministry of Health, £1,050 was granted to the County Nursing Association during 1938 for the training and placing of midwives. The new Rules of Training and Examination of the Central Midwives Board came into operation in 1938. Under the old regulations the minimum period of training for trained nurses was six months, and for students other than trained nurses one year. Under the new regulations the period of training was extended, and divided into two parts:—

- (1) A first period of six months in the case of students who are trained nurses, and eighteen months in all other cases.
- (2) A second period of six months in all cases.

This extension of the training period necessarily involved a considerable increase in expenditure on the training scheme of the County Nursing Association, and application was made to the County Council for an increase in the grant. The Council decided to undertake responsibility for one-half of the expenditure incurred in training students whose course of training extends over one year, and two-thirds of the expenditure involved in training students whose course of training extends over two years. It was also decided that the number trained should not exceed twelve state-registered nurses, and twelve untrained students, in any one year. It was estimated that the expenditure thus incurred by the County Council would ultimately amount to approximately £1,980 per annum.

The County Nursing Association was approved as a training authority in respect of the second period of training for the Certificate of the Central Midwives Board.

Two of the Council's midwives at Wallsend were approved by the Board as instructors in the conduct of district cases and their services were placed at the disposal of the County Nursing Association for this purpose. Arrangements were also made for the pupils to attend for instruction in the work of a Child Welfare Centre at the centres at Shiremoor, Backworth, Forest Hall, Whitley Bay and Monkseaton.

A course of lectures on Social Legislation, Voluntary Agencies in Maternity and Child Welfare and National Health Insurance is included in the Syllabus of the second period of training.

The Maternity and Child Welfare Officer and Chief Supervisor of Midwives for the County has been approved as Lecturer in these subjects.

General Supervision of Midwives.

The supervision of midwives is carried out by the County Medical Officer and his assistants. The Superintendent of Health Visitors and the Superintendent of the County Nursing Association are both Inspectors of Midwives. The Maternity and Child Welfare Officer acts as Chief Supervisor of Midwives and reports directly to the County Medical Officer.

PUBLIC HEALTH (NOTIFICATION OF PUERPERAL FEVER AND PUERPERAL PYREXIA) REGULATIONS, 1926.

Public Health Act, 1936.

Under these Regulations the County Council are empowered to make provision for the special treatment of any lying-in woman living within the Maternity and Child Welfare area of the County who may be suffering from any Puerperal infection.

When the Public Health Act, 1936, came into operation, puerperal fever, as distinct from puerperal pyrexia, ceased to be a notifiable condition *per se*.

The medical practitioner is required to notify the District Medical Officer of Health when he first becomes aware that a woman upon whom he is in attendance is suffering from puerperal pyrexia. The District Medical Officer forwards a copy of all such notifications to the County Medical Officer.

The midwife is also obliged under the Rules of the Central Midwives Board to notify the Local Supervising Authority (this being the County Council) of any case in which there is a rise of temperature above 99.4°F. on three successive days or where a temperature of 100.4°F. has been sustained during a period of 24 hours or has recurred within that period.

The Schedule requires that medical practitioners should be able to obtain any or all of the following :—

- (i) To have a second opinion on the case ;
- (ii) to have a bacteriological examination of (a) lochia ; (b) blood ;
- (iii) that the patient be admitted to hospital ;
- (iv) that a trained nurse be provided.

The County Council's panel of Obstetrical Consultants includes :—

Professor Ranken Lyle, M.D.
 Mr. Farquhar Murray, M.D., F.R.C.S.
 Mr. Harvey Evers, M.S., F.R.C.S.
 Mr. F. E. Stabler, M.D., F.R.C.S.
 Mr. W. Hunter, M.D., M.C.O.G.

The services of the Consultants were utilised in 22 cases. The following statement indicates the nature of the cases encountered during the year.

Puerperal Pyrexia.

Cases delivered by Midwives as such.	Total cases notified.	Treatment at		Deaths.
		Home.	Hospital.	
2,265	21	11	10	Nil.

Provision for Complicated Cases of Midwifery.

Similarly, in complicated or difficult cases of midwifery the medical attendant may call for the assistance of one of the Consultant Obstetricians who, if necessary, may deliver the woman in her own home. If institutional treatment is imperative the patient can be removed to the Princess Mary Maternity Hospital by ambulance. In necessitous cases this is provided free.

MATERNAL MORTALITY.—MEDICAL PRACTITIONERS CALLED IN BY MIDWIVES.

Ministry of Health Circular, 1705.

In the report (C.M.D. 5422) on Maternal Mortality, a recommendation is made that Local Supervising Authorities should be empowered to take steps to ensure that the best local obstetric skill is available in all cases in which midwives are required under the Rules of the Central Midwives Board to call in a doctor. Circular 1705 of the Ministry of Health deals with the methods by which effect can best be given to this recommendation.

In accordance with the suggestions contained in the Circular, the North-umberland County Council decided to put the following arrangements into operation :—

1. A panel list to be drawn up composed of registered medical practitioners who notify themselves as willing to be called in by midwives in an emergency.
2. The Local Authority to set up an Advisory Committee consisting of :—
 - (a) The Medical Officer of Health as Chairman ;
 - (b) two general practitioners ;
 - (c) two consultant obstetricians.

This Committee to scrutinise the panel list, and make recommendations to the Authority as to the suitability of applicants to be included on the list.

Professor Farquhar Murray. and Dr. Harvey Evers have accepted an invitation to represent the consultant obstetricians in the area on the Advisory Committee, and the local branch of the British Medical Association nominated Dr. Moyes of Warkworth and Dr. Brown of Stakeford to represent the local medical practitioners.

Practitioners practising in the County have been circularised in order to ascertain which of them are willing to serve on the panel.

Maternal Mortality.

The following statement shows the Maternal Mortality rates classified under the headings of Puerperal Sepsis, and other causes, and for the purpose of comparison figures are also included below for the whole of England and Wales for the year 1938.

Year.	Puerperal Sepsis.		Other Puerperal Causes.		Total Deaths.	Rate per 1,000 Births.	Total Births (live and still).
	Deaths.	Rate per 1,000 Births.	Deaths.	Rate per 1,000 Births.			
1929	11	1.60	22	3.20	33	4.80	6,885
1930	17	2.41	22	3.13	39	5.55	7,025
1931	11	1.62	18	2.64	29	4.26	6,801
1932	22	3.22	24	3.51	46	6.73	6,838
1933	20	3.04	22	3.34	42	6.38	6,578
1934	15	2.25	21	3.16	36	5.42	6,642
1935	9	1.36	14	2.11	23	3.47	6,612
1936	10	1.54	16	2.47	26	4.01	6,477
1937	6	0.93	20	3.11	26	4.04	6,430
1938	4	0.63	14	2.20	18	2.83	6,350

England and Wales :—

Puerperal Sepsis	...	...	0.86
Other Puerperal Causes	...	...	2.11
			<u>2.97</u>

The following statement indicates the various County districts where Maternal Deaths occurred :—

District.	Puerperal Sepsis.	Other Puerperal Causes.	Total.
Blyth Borough	1	4	5
Morpeth Borough	1	—	1
Ashington U.D.	—	3	3
Gosforth U.D.	—	1	1
Longbenton U.D.	1	1	2
New biggin U.D.	1	—	1
Newburn U.D.	—	1	1
Whitley & Monkseaton U.D.	—	1	1
Haltwhistle R.D.	—	1	1
Hexham R.D.	—	2	2
TOTALS	4	14	18

Public Health (Ophthalmia Neonatorum) Regulations, 1926-1937.

Ophthalmia Neonatorum is defined as any purulent discharge from the eyes of an infant occurring within twenty-one days from the date of birth. The duty of notification to the Maternity and Child Welfare Authority is placed upon the medical practitioner in attendance.

In any case of inflammation of, or discharge from, the eyes of the child, however slight, a midwife in attendance must under the Rules of the Central Midwives Board call in a registered medical practitioner, using for this purpose the form for medical aid. She must also send notice to the Local Supervising Authority that medical aid has been sought.

Medical and nursing attendance are available in all cases of ophthalmia, and immediate removal to hospital if necessary or desirable. Arrangements have been made with Preston Hospital, North Shields, and the mother and child will be admitted on application to the Medical Superintendent.

The following statement indicates the number of cases notified during the year and the results of treatment :—

No. of Births attended by Midwives as such.	Total cases Notified.	Total admitted to Hospital.	Nursed at Home.	Total Recovery.
2.265	6	2	4	6

PUBLIC HEALTH ACT, 1936.

MATERNITY AND CHILD WELFARE.

Notification of Births.

During the year 3,275 live births (3,128 legitimate and 147 illegitimate) and 141 still-births (133 legitimate and 8 illegitimate) occurred in the administrative county. Under the above Act the obligation to notify a birth is placed upon

- (a) The father of the child if he is actually residing in the house where the birth occurs ;
- (b) Any person in attendance upon the mother, up to six hours after the birth.

The following shows the number notified and registered :—

	<i>Notified.</i>			<i>Registered.</i>		
Live	2,498	...	...	3,275
Still	48	...	...	141
			<u>2,546</u>			<u>3,416</u>

Failure to notify is chiefly due to ignorance of the Law or to the belief that the birth would be notified by some other person.

TABLE 1.

Table shewing numbers of Births and numbers of Deaths under one year in Urban and Rural Districts and number of Deaths of Infants under one year investigated by Health Visitors during the year ended December 31st, 1938.

		Amble Urban.		Alnwick Urban.		Berwick-on-Tweed Borough.		Seaton Valley Urban.		Morpeth Borough.		Newbiggin-by-the-Sea Urban.		Prudhoe Urban.		Whitley & Monkseaton Urban.		Hexham Urban.		Rothbury Rural.		Alnwick Rural.		Belford Rural.		Bellingham Rural.		Castle Ward Rural.		Glendale Rural.		Haltwhistle Rural.		Hexham Rural.		Morpeth Rural.		Norham & Islandshires Rural.		Longbenton Urban.		TOTAL.		GROSS TOTAL.																																																																																																																																																																																																																																																							
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.																																																																																																																																																																																																																																																								
Live Births—		42	33	45	36	78	79	197	195	53	59	67	69	58	77	147	154	70	49	40	27	79	81	42	37	26	31	91	89	53	35	46	42	151	117	132	105	20	20	196	160	1633	1495	3128	147																																																																																																																																																																																																																																																						
Number of Legitimate Births ...		4	1	4	2	5	5	5	7	5	4	5	2	1	...	8	4	4	4	3	3	5	1	2	2	4	1	6	2	3	3	1	4	7	3	2	3	2	2	5	9	88	59	3128	147																																																																																																																																																																																																																																																						
Number of Illegitimate Births ...		4	1	4	2	5	5	5	7	5	4	5	2	1	...	8	4	4	4	3	3	5	1	2	2	4	1	6	2	3	3	1	4	7	3	2	3	2	2	5	9	88	59	3128	147																																																																																																																																																																																																																																																						
Total Number of Births ...		46	34	49	38	83	84	202	202	58	63	72	71	59	77	155	158	74	53	43	30	84	82	44	39	30	32	97	91	56	38	47	46	158	119	141	108	22	20	201	169	1721	1554	3275																																																																																																																																																																																																																																																							
Still Births {	Legitimate ...	4	2	3	...	2	...	14	6	1	1	7	3	3	3	8	2	1	3	1	...	3	2	1	2	2	2	6	...	1	1	7	7	7	6	1	...	13	8	85	48	133	8																																																																																																																																																																																																																																																						
	Illegitimate...	1	2	1	...	1	1	2	...	5	3	133	8																																																																																																																																																																																																																																																							
	Total ...	4	2	3	...	2	...	14	6	1	2	7	3	3	3	10	3	1	4	1	...	3	2	1	2	2	2	6	...	2	1	7	7	7	6	1	...	15	8	90	51	141																																																																																																																																																																																																																																																							
Deaths of Infants under 1 year {	Legitimate	2	4	1	5	6	15	12	6	5	2	4	5	3	10	3	4	2	4	1	6	6	2	2	1	3	5	4	1	1	2	3	9	9	6	7	14	10	101	84	185																																																																																																																																																																																																																																																							
	Illegitimate...	1	1	1	1	1	1	5	...	1	...	1	2	12	3	15																																																																																																																																																																																																																																																							
Infantile Mortality Rates (per 1,000 births) ...		2.5		5.7		7.2		6.6		9.9		4.2		5.8		4.4		4.7		6.8		7.2		7.2		6.4		5.3		2.1		10.7		6.8		5.6		...		7.0		...		61																																																																																																																																																																																																																																																							
Total Number of Deaths (under 1 year) investigated...		...	2	4	1	6	6	14	12	7	5	2	4	5	3	11	3	4	2	4	1	6	6	3	3	1	3	6	4	1	1	7	3	10	9	7	7	14	11	112	86	198																																																																																																																																																																																																																																																							
Causes of Deaths of Infants under 1 year in Urban and Rural Areas :—																																																																																																																																																																																																																																																																																																			
Prematurity	2	...	2	1	2	3	1	1	1	...	1	...	5	1	2	...	3	1	2	2	...	2	...	2	2	1	3	1	1	6	1	33	16	49																																																																																																																																																																																																																																																						
Congenital Debility	1	2	2	1	2	2	...	2	2	1	3	1	1	3	33	16	49																																																																																																																																																																																																																																																						
Congenital Deformities, Malformations, Injuries...		1	4	1	...	1	1	1	1	1	3	2	3	14	9	23																																																																																																																																																																																																																																																					
Inanition and Lack of Vitality		1	1	1	1	3	1	3	1	4	23																																																																																																																																																																																																																																																			
Cardiac Failure...		1	1	2	1	3	1	4	23																																																																																																																																																																																																																																																			
Icterus Neonatorum	1	1	4	23																																																																																																																																																																																																																																																			
Atelectasis	1	1	3	1	4	23																																																																																																																																																																																																																																																	
Cerebral Haemorrhage...		1	1	3	1	4	23																																																																																																																																																																																																																																																	
Pyloric Stenosis...		1	1	1	1	3	1	4	23																																																																																																																																																																																																																																																
Melaena Neonatorum	1	...	1	1	3	1	4	23																																																																																																																																																																																																																																																
Bronchitis, Pneumonia		...	1	1	1	1	1	2	5	2	2	1	2	...	1	...	1	1	2	...	1	1	2	...	1	...	4	2	3	2	20	17	37	3	10																																																																																																																																																																																																																																																					
Gastro Enteritis	1	1	1	1	1	2	1	3	5	8	4	23																																																																																																																																																																																																																																																			
Convulsions	1	1	1	1	2	1	1	3	5	8	4	23																																																																																																																																																																																																																																																	
Meningitis	1	1	1	3	5	8	4	23																																																																																																																																																																																																																																																	
Pyelitis	1	1	3	5	8	4	23																																																																																																																																																																																																																																																	
Accidentally Suffocated		1	1	...	1	1	1	3	5	8	4	23																																																																																																																																																																																																																																																
Asphyxiation	2	1	1	1	3	5	8	4	23																																																																																																																																																																																																																																																
Septic Meningitis	1	3	5	8	4	23																																																																																																																																																																																																																																															
Whooping Cough	1	2	1	2	1	1	3	5	8	4	23																																																																																																																																																																																																																																																
Marasmus	1	...	2	1	1	3	5	8	4	23																																																																																																																																																																																																																																																
Pink Disease	1	1	3	5	8	4	23																																																																																																																																																																																																																																															
Tetanus Neonatorum	1	1	3	5	8	4	23																																																																																																																																																																																																																																															
Measles	1	1	1	3	5	8	4	23																																																																																																																																																																																																																																																
Jaundice...		1	1	3	5	8	4	23																																																																																																																																																																																																																																																
Haemorrhagic Disease		1	1	1	3	5	8	4	23																																																																																																																																																																																																																																															
Enlarged Thymus	2	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2	...	2

TABLE 2.

Investigated Cause of Deaths of Infants under one year, and Children aged 1-5 years, with age periods at which death occurred during the year ended December 31st, 1938.

[illegible]

TABLE 3.

Investigated Cause of Deaths during the year ended December 31st, 1938, of
Illegitimate Children under the age of one year, arranged in sanitary districts.

	Berwick-on-Tweed Borough.		Morpeth Borough.		Whitley and Monkseaton Urban.		Belford Rural.		Castle Ward Rural.		Haltwhistle Rural.		Hexham Rural.		Morpeth Rural.		Longbenton.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Number of Illegitimate Births in these Areas	1	...	1	...	1	...	1	1	1	...	5	...	1	...	1	...	...	2
Number of Deaths under one year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Number of Deaths investigated...	1	...	1	...	1	...	1	1	1	...	5	...	1	...	1	...	...	...
CAUSE OF DEATH.																		
Enlarged Thymus... ..	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Maternal Toxaemia ... ..	...	...	1	...	...	...	1	1	...	...	2	...	1	...	1	...	...	2
Prematurity ... ..	...	...	...	...	1	...	1	...	...	...	...	...	1	...	...	...	...	...
Intercranial Haemorrhage ... ..	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Bunctutis ... ..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Whooping Cough ... ..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Asphyxlation ... ..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...



The districts for which the County Council is responsible as the Maternity and Child Welfare Authority are :—

Boroughs—Berwick-upon-Tweed and Morpeth.

Urban Districts.—Alnwick, Amble, Hexham, Longbenton, Newbiggin-by-the-Sea, Prudhoe, Seaton Valley, Whitley and Monkseaton.

Rural Districts.—Alnwick, Belford, Bellingham, Castle Ward, Glendale, Haltwhistle, Hexham, Morpeth, Norham and Islandshires and Rothbury.

Infantile Mortality.

The rates of Infant Mortality per 1,000 live births for the whole of the administrative county, for the county area for Maternity and Child Welfare purposes, and for England and Wales are shewn below :—

Whole County	...	...	...	...	65
Maternity and Child Welfare County	...	...	...	...	61
England and Wales	...	...	...	...	53

Death Rate for Illegitimate Children.

Of the 147 live illegitimate children born, 15 died before they reached the age of one year. The following table gives the comparison with children born in wedlock :—

Number of Legitimate live births in Council's area	...	...	...	3,128
Do. Illegitimate live births	do.	do.	...	147
Total live births...	...	...	...	3,275

Number of deaths of legitimate infants	185	=	59 deaths per 1,000 legitimate births
Do. illegitimate infants	15	=	102 deaths per 1,000 illegitimate births
Total deaths	200	=	61 deaths per 1,000 births.

Neo-natal Deaths.

Of the 200 deaths of infants under the age of one year 84 died before they reached the age of one week, and a further 23 before they reached the age of four weeks. An analysis shows the principal causes of these deaths to be :—

Prematurity	...	...	...	46
Congenital defects and injuries at birth	...	...	...	16
Congenital debility	...	...	...	9
Bronchitis and pneumonia	...	...	...	2

Infantile Deaths.

Between the ages of four weeks and one year analysis shows the principal causes of death to be :—

Prematurity	...	...	...	3
Congenital defects and injuries at birth	...	...	...	7
Congenital debility	...	...	...	1
Bronchitis and pneumonia	...	...	...	35

HEALTH VISITING SERVICE.

Under the Council's scheme the County is divided into districts in each of which there is a resident Health Visitor who undertakes all the duties

of the Maternity and Child Welfare Service, School Medical Service, and the Tuberculosis Service. In addition she carries out duties in the Ante-natal Clinics, Child Welfare Centres, Immunisation Clinics, Dental Clinics, 'Toddlers' Clinics, Distribution of Milk to necessitous mothers and children, Medical Inspection of School Children, School Dental Clinics, Minor Ailments Clinics, Ophthalmic Clinics, Tuberculosis Dispensaries, and carries out all the home visiting in connection with the work. One health visitor, who is engaged solely in Tuberculosis work, is employed in the Wallsend area.

The following is a summary of the number of visits made by the staff for Maternity and Child Welfare; other work is recorded elsewhere under the appropriate headings.

Live Births registered in Administrative County.	First Visits to Infants.	Re-visits to Infants under the age of 1 year.	Visits to Children, age 1—5 yrs.	Ante-Natal Visits.	
				First Visits.	Re-Visits.
3,275	3,094	16,857	41,528	554	585

Ante-natal Care of Mothers.

At the end of 1938, there were 12 special ante-natal clinics on the county. In addition, ante-natal consultations were being carried out at a time set aside during the ordinary session at 5 other centres. During the year special sessions were inaugurated at 2 centres, and equipment was provided at 4 other centres. It is confidently expected that the scope of this work will be greatly extended in the near future. Women are becoming increasingly interested in the subject of ante-natal care, and appear to be anxious to take advantage of any facilities which are provided. It is a matter for regret that in many districts there is an apparent lack of co-operation in the work on the part of the local medical practitioners.

The following statement indicates the attendances and number of consultations carried out at the special centres :—

Name of Clinic.	No. of Sessions Clinic was open.	No. of Mothers attending.		No. of attendances made.		No. of Consultations.	Post-Natal Consultations.
		Ante-Natal.	Post-Natal.	Ante-Natal.	Post-Natal.		
Cramlington ...	25	17	—	42	—	42	—
Dinnington Colly.	23	41	—	110	—	105	—
Haltwhistle ...	25	23	18	56	36	79	36
Dudley ...	14	50	—	87	—	87	—
Forest Hall ...	8	72	—	72	—	69	—
Hexham ...	26	59	19	126	19	126	19
Lynemouth ...	12	24	8	78	—	78	8
Newbiggin ...	51	129	71	281	71	411	71
Prudhoe ...	48	101	97	369	97	369	97
Shiremoor ...	26	67	52	208	—	208	52
Stocksfield ...	12	20	9	60	10	60	10
Whitley Bay ...	24	79	46	160	86	160	86

In addition 43 expectant mothers were given ante-natal care at the ordinary sessions of the Maternity and Child Welfare Clinics and 199 consultations were carried out by the medical officers in attendance. The total number of expectant mothers attending the clinics was 725 representing 21 per cent. of the births in the administrative county for Maternity and Child Welfare purposes.

In remote areas where there is no convenient clinic a rural ante-natal scheme has been established. Any midwife engaged to attend an uninsured woman in her confinement may call in the patient's own medical attendant to carry out ante-natal and post-natal examinations, should she discover any condition which she considers to be abnormal. The examination may be carried out either at the home of the patient or at the doctor's surgery. The Council pay a fee of 5/- plus mileage for each examination and report. During the year 39 mothers were given such examination. The scheme is worked on similar lines to that which provides for the calling in of a doctor by a midwife in an emergency.

In rural areas the midwife usually acts as maternity nurse only. The doctor is booked for the case and is, therefore, responsible for the ante-natal examination of the mother in her home.

Ante-natal Consultant Service.

Women who have been examined either at the Council's Clinics or by their own medical attendants and who are considered to require Specialist examination may be sent by appointment to Newcastle to be seen by one of a Panel of Obstetric Consultants appointed by the County Council. Consultation fees and travelling expenses of the patient and a woman friend are paid by the Council. In the event of the woman being unable to travel, the Consultant visits the patient in her own home.

During the year 28 women were sent for Consultation under this scheme.

Maternity Hospitals.

The County Council does not maintain any maternity hospitals directly. Difficult and complicated cases or those in which the medical practitioner cannot safely deliver the woman in her own home are admitted to the Preston Hospital, North Shields, and the Princess Mary Maternity Hospital. In the former, cases are paid for at the Public Assistance Committee's rate; in the latter, the County Council by arrangement pay the whole of the fee in necessitous cases, or the balance of any sum which the patient cannot afford. During the year 256 such cases were admitted to the Princess Mary Maternity Hospital at a cost to the County Council of £513 16s. 9d.

In the following hospitals beds are available and medical practitioners may send their patients there :—

- The War Memorial Hospital, Haltwhistle ;
- The Tynedale Maternity Hospital, Corbridge ;
- The Willington Quay Maternity Hospital ;
- The Wallsend and Willington Quay Maternity Hospital.

Substantial grants are made by the County Council to the Willington Quay and Corbridge Maternity Hospitals.

Proposed Maternity Hospital at Berwick.

Repeated representations have been received at various times from organisations in Berwick regarding the provision of hospital accommodation

for maternity cases in the north of the county. It is pointed out that Newcastle and Edinburgh are the nearest points at which there is hospital provision for this type of case, both towns being approximately 60 miles from the Berwick district.

In response to these representations, it was decided towards the end of 1937 to proceed with the preparation of plans for a maternity hospital of 10 beds in or near Berwick. It was recommended that the hospital should be erected on the site at present occupied by the Public Assistance Institution when that became available. Sketch plans were prepared by the County Architect, and submitted to the Minister of Health, who expressed himself as favourably disposed towards the proposals. It was indicated, however, that the Minister's approval would not be given to any scheme, which included provision for the treatment of septic cases within the precincts of the hospital.

The question of hospital provision for infectious diseases for the whole of the northern area of the county being at that time under review, it was decided to wait until the question of the reception of septic cases could be finally settled before proceeding further with the scheme for the erection of a maternity hospital. This question having now been settled the scheme should go forward at the earliest convenient opportunity. For some years a voluntary ladies committee has been in existence and a considerable sum of money has been raised for this purpose. There is no doubt that the provision of a maternity hospital would prove of inestimable benefit to midwifery work in the area.

*Haltwhistle and District War Memorial Hospital.
New Maternity Wing.*

For many years a maximum of 4 beds had been available for maternity cases at the War Memorial Hospital, Haltwhistle. Latterly, however, the accommodation at the hospital has been severely overtaxed and the accommodation has been found to be totally inadequate. In 1936 (Haltwhistle being a distressed area) an application for financial assistance in the building of a new maternity wing was made to the District Commissioner for Special Areas who promised support conditionally upon the County Council also contributing. The County Council decided that they would assume responsibility for part of the expenditure on the erection and equipment of the new block, and half of the annual deficit on the administration of the hospital after completion.

Negotiations were immediately entered into between the several Authorities. These proved to be more complicated and protracted than had been at first anticipated. However, they were successfully completed in 1938 and detailed plans and final estimates were approved by the Ministry of Health.

The total cost is estimated to be approximately £8,000, and this expenditure will be allocated as follows :—

Haltwhistle Committee	...	...	...	£1,200 or 15%.
County Council	...	...	...	£2,200 or 27½%
Commissioner for Special Areas	...	...	...	£4,600 or 57½%

The hospital, which is in course of erection at the time of writing, will consist of six beds with adequate labour ward and Nursery accommodation and staff quarters. It should prove a valuable addition to the number of Maternity Hospitals already existing in the County.

Home Helps.

A service of Home Helps has been established in the Prudhoe and Seaton Valley Urban Districts, and the Alnwick and Bellingham Rural Districts, the intention being to extend the service over the whole county should it prove to be successful in these areas. This service is intended to provide help in the home under the following circumstances :—

- (1) During pregnancy if the mother's condition renders this desirable.
- (2) During confinement and the lying-in period.
- (3) During the absence of the mother in a convalescent home or hospital, if the mother's disability is due to pregnancy or parturition.

Under ordinary circumstances, the home-help is non-resident, but in remote, rural areas a resident service may be provided. She is expected to undertake all the household duties, but must not, under any circumstances, undertake the responsibilities of the midwife or maternity nurse, or interfere with the instructions of the doctor in attendance.

Remuneration is at the rate of 30/- per week. This is paid directly by the County Council, but part, or the whole of the cost may be recovered from the householder if the financial circumstances permit. A scale is in operation by means of which the amount to be recovered is assessed, the scale being an extremely generous one, and the service within the resources of all mothers.

Women who are recommended as suitable to undertake the duties are inspected by the Superintendent of Health Visitors, and a register has been compiled for each district. For the services of home helps application is made through the Health Visitor for the area, and she also receives applications for admissions to the register. In addition, she is responsible for the supervision of the work and conduct of the home help whilst she is on duty, and reports thereon are forwarded at weekly intervals to the County Medical Officer.

Each home help is supplied with a copy of the following rules, to which she must strictly conform :—

- (1) Hours of duty will be made to suit the convenience of the household, but will not exceed 9 hours a day.
- (2) She will keep the house in a clean condition and do all the baking cooking, mending, and shopping for the household.
- (3) She will do one week's washing for each seven days she remains on duty, but no arrears of washing or mending.
- (4) She will be expected to bring her own food and cook it in the house where she is working, except in cases where it is necessary that she should reside in the house.
- (5) She must not undertake the duties of a midwife or maternity nurse and must not interfere in any way with the instructions of the doctor or midwife.
- (6) She must not undertake any treatment whatsoever.
- (7) She must immediately report to the doctor or health visitor if she feels ill or is suffering from sore throat, any sores or any rash.
- (8) She must not, either in the home or elsewhere, interfere with or discuss the family's affairs and in particular their religious opinions.

The following is the scale which is in operation for the purpose of assessing the amount of the contribution to be paid for the services of a home help.

Income after deducting
rates and rents.

No. in Family.	No Charge.	Daily Charge.								Full Charge.
		3d.	6d.	9d.	1/-	1/3	1/6	2/-	3/-	
2	20/-	25/-	30/-	35/-	40/-	45/-	50/-	55/-	60/-	65/-
3	27/6	32/6	37/6	42/6	47/6	52/6	57/6	62/6	67/6	72/6
4	33/6	38/6	43/6	48/6	53/6	58/6	63/6	68/6	73/6	78/6
5	37/6	42/6	47/6	52/6	57/6	62/6	67/6	72/6	77/6	82/6
6	41/6	46/6	51/6	56/6	61/6	66/6	71/6	76/6	81/6	86/6
7	45/6	50/6	55/6	60/6	65/6	70/6	75/6	80/6	85/6	90/6
8	49/6	54/6	59/6	64/6	69/6	74/6	79/6	84/6	89/6	94/6

or over.

Child Welfare Centres.

At the end of the year there were 39 Child Welfare Centres under the control of and financed by the County Council. Four of these were staffed by the Council's Assistant Medical Officers and the remainder by local practitioners acting as part-time officers. One new centre was opened, and additional sessions were provided at 5 other centres. In addition, medical officers were appointed to two existing milk sales centres.

These centres are held in premises as shewn below. They are rented for the specific purpose but many of them are very unsuitable.

Church and Chapel rooms	...	...	...	16
Institutes or Village Halls	...	...	...	14
Offices rented from Local Authorities	...	...	...	2
Council house	...	...	...	1
Rooms attached to Hospital	...	...	...	1
Nurses' Home	...	...	...	1
Specially erected Centres	...	...	...	4

Child Welfare and Ante-natal Clinics.

During the year a survey was made of the premises in use as Child Welfare Centres and Ante-natal Clinics and as a result it was resolved to erect new centres at the following places:—Alnwick, Amble, Burradon, Cramlington, Forest Hall, Haltwhistle, Morpeth, Red Row and Whitley Bay. A five year plan was formulated providing for the erection of these buildings at the rate of two each year. At the same time, it was decided to enlarge premises at Prudhoe and also to acquire an existing structure at Dinnington Colliery for the purpose of converting it into a Child Welfare Centre.

Before this survey was made it had already been decided to erect new centres at Seaton Delaval and Hexham.

During the year new premises were erected and put into occupation at Newbiggin-by-the-Sea and Shiremoor.

These erections of existing premises and the erection of new premises have all been rendered urgently necessary by the expansion of maternity and child welfare work, and the impossibility of conducting it efficiently in unsuitable surroundings.

TABLE 4.
Infant Welfare Centres.—Report on Work for Year ended December 31st, 1938

NAME OF CENTRE.	Number of Children transferred from 1937 Register to 1938 Register.		Number of Children who attended the Centre for the first time during the year.		Total Number of Attendances at Centre.		Number of Children who attended during the year and at end of the year were		Consultations made by Medical Officer.		Mothers and Infants.	Visits of Medical Officer for Consultation.	Number of Half-day Sessions each Centre was open.		Number of Deaths of Children attending the Infant Welfare Centres.		Name of Medical Officer attending.
	Aged under 1 year.	Aged 1—5 years.	Aged under 1 year.	Aged 1—5 years.	Under 1 year.	Years 1—5.	Under 1 year.	Between 1 and 5 years.	Mothers.	Children.	No. of Cases who received Milk during the year.	Number of Sessions.	For consultation with Doctor or Health Visitor.	For Combination of these Services.	Under 1 year.	Aged 1—5 years.	
Allendale	6	6	14	17	88	137	9	34	176	232	13	7	12	12	...	...	Dr. Bourke.
Alnwick	42	129	69	26	893	1,318	51	196	310	334	67	23	50	50	...	...	Dr. Reid.
Amble... ..	43	107	61	16	933	1,216	51	158	402	453	76	20	51	51	1	...	Dr. O'Sullivan.
Backworth	40	61	50	26	695	331	45	132	968	1,002	52	49	...	51	1	...	Dr. Glen Davison.
Belford	10	24	22	10	273	193	16	48	366	408	25	24	...	25	...	...	Dr. McDonald, M.O.H.
Berwick	30	28	78	9	1,070	516	67	46	390	390	61	21	...	51	2	...	Dr. MacLagan, M.O.H.
Burradon ... ..	...	...	54	39	481	296	35	59	164	186	34	9	...	38	...	...	Dr. Thompson.
Corbridge	12	31	12	26	252	235	21	56	185	228	6	12	...	23	1	...	Dr. Turnbull.
Cramlington	45	60	73	11	1,080	535	64	125	617	767	76	25	51	51	2	...	Dr. Quinn.
Dinnington Colliery ..	31	35	56	7	971	379	45	107	406	406	57	22	50	25	2	...	Dr. McLeod.
Dudley	38	60	89	11	933	493	75	123	501	549	80	23	51	51	3	...	Dr. Craig.
Forest Hall ... ..	...	...	120	85	1,233	597	65	147	255	255	56	17	38	38	3	...	Dr. Jamieson.
Haltwhistle	33	135	34	39	662	1,326	26	122	600	685	119	25	51	51	3	...	Dr. Thompson.
Haydon Bridge	15	62	19	6	375	656	18	72	164	203	46	12	...	51	...	...	Dr. Hall.
Hexham	61	177	108	57	2,394	4,486	100	283	696	725	189	40	63	51	...	1	Rota Medical Practitioners.
Lynemouth	29	33	48	20	810	346	37	58	94	140	21	12	...	51	1	...	Dr. Skene.
Morpeth	69	83	77	13	1,126	637	71	171	499	542	92	47	51	51	1	1	Dr. Dickie.
Newbiggin	88	110	128	36	2,540	1,860	102	260	210	492	110	50	51	51	3	...	Dr. Angus, M.O.H.
North Seaton... ..	11	17	27	6	526	280	19	35	98	178	16	12	...	51	...	...	Dr. Angus, M.O.H.
Pegswood	15	37	35	3	562	328	26	64	690	690	8	48	...	51	1	...	Dr. Dickie.
Ponteland	29	21	25	14	660	171	15	79	194	194	34	22	...	48	...	...	Dr. Bolt.
Prudhoe	104	159	110	17	2,103	2,686	96	224	853	965	79	42	51	51	2	1	Dr. Dewell.
Red Row	31	62	67	9	739	360	56	90	320	370	40	26	...	51	1	2	Dr. Scott.
Rothbury	5	42	17	3	144	505	7	60	106	153	12	14	...	51	...	...	Dr. Bolt.
Seaton Burn	25	18	37	20	345	409	31	62	119	119	32	10	...	48	1	...	Dr. Gordon.
Seaton Delaval	43	160	95	4	1,581	1,394	78	203	675	675	69	36	51	51	...	1	Dr. Ogilvie.
Seghill... ..	22	61	41	6	671	660	34	96	284	304	28	45	...	51	1	...	Dr. Henderson.
Shiremoor	77	136	68	21	955	885	54	250	50	645	85	26	52	52	3	...	Dr. Thompson.
Stocksfield	30	64	47	15	729	708	38	118	361	389	24	26	...	50	...	...	Dr. Ogilvie.
West Allotment ... ..	...	...	22	20	358	110	17	22	133	133	6	9	...	37	...	...	Dr. Thompson.
West Monkseaton	49	64	87	27	1,853	498	78	149	302	305	20	20	...	52	...	...	Dr. Thompson.
Whitley Bay	178	105	147	38	1,959	1,399	109	359	1,490	1,199	143	63	63	51	1	...	Dr. Thompson.
Wooler	15	54	17	6	573	898	12	55	255	255	12	19	...	51	...	...	Dr. Bousfield.
Widdrington	10	24	42	23	415	597	33	59	138	153	31	18	...	51	1	...	Dr. Welch.
MILK SALES CENTRES Dinnington Village	11	11	10	3	181	157	8	31	...	...	40	...	...	26	...	...	.....
Hartford	10	7	27	13	323	114	19	38	...	...	20	...	...	52	1	...	.....
North Sunderland... ..	12	32	21	8	237	217	15	38	...	...	28	...	...	25	...	1	.....
Radcliffe	18	42	25	8	491	437	20	67	...	...	26	...	...	51	1	...	.....
Wylam ... ..	...	...	26	18	197	218	12	32	...	...	8	...	...	25	1	...	.....

The administration of the Maternity and Child Welfare Services in Longbenton Urban District was transferred to the County Council on 1st April, 1938.

The two health visitors employed were transferred to the County staff and a vacancy caused by the previous resignation of the third health visitor was filled by one of the County Council's trainees.

The Child Welfare Centres established at Forest Hall, West Allotment, Burradon, Seaton Burn and Dudley were continued as before and arrangements completed for the inclusion of these areas in the services established in the County by the Maternity and Child Welfare Committee of the County Council.

*Supply of Milk to Expectant and Nursing Mothers and Children
under the age of five years.*

Arrangements are in force for the provision of dried milk and chocolate milk to mothers and children attending the Child Welfare Centres and Ante-natal Clinics on the recommendation of the Medical Officer in attendance.

The scheme applies to nursing and expectant mothers and children up to the age of five years who are not in attendance at a school approved for grant by the Board of Education. The income of the household is assessed in order to determine whether the milk shall be supplied free or at reduced or cost price. The scale takes into account the amount paid in rent and the number in the family.

Early in the year it was revised, a more generous one being put into operation. At the same time provision was made for increased amounts to be available and the scheme was also extended to include children up to the age of five years and mothers at any stage of pregnancy.

This extension of scope of the scheme has markedly increased the total amount of milk supplied annually. Dried milk is preferred because there is very little provision for the sanitary storage of liquid milk in the houses of colliery villages. Further, its adaptation to the requirements of the infant is readily understood by the mother.

Applicants are required to fill in a form giving full particulars of income, number in family, etc. This information is verified and milk or cocoa is supplied for a period of four weeks. Applications are reviewed monthly so long as the food is required.

The following scale is now in operation :—

Number in family.	Weekly income after deducting rent.	
	Free Milk.	Milk at half-price.
Parents only (Ante-natal case) ...	20/-	25/-
Parent and 1 child	27/6	32/6
„ „ 2 children	33/6	38/6
„ „ 3 „	37/6	43/6
„ „ 4 „	41/6	48/6
„ „ 5 „	45/6	53/6
„ „ 6 „ and over	49/6	58/6

With regard to the assessment of income, the following allowances are made :—

- (1) Rent is deducted.
- (2) No allowance is made for insurance or hire purchase.
- (3) War pensions are not included.
- (4) Money received for rooms let as lodgings or money received for sub-let rooms is reckoned as income.
- (5) Where money is received in payment for board and lodgings one-quarter of such sum to a maximum of 5/- is assessed as profit and included in the income, but the lodger is not counted as a member of the family.
- (6) In the case of illegitimate children, the mother and her infant are regarded as a separate family and assessed accordingly.

Dried milk was supplied by the Woodland Dried Milk Co., Ltd., Garstang, Lancs., on contract. Virol and Numol are also supplied, or sold, in the circumstances mentioned above to any mother attending the Centre.

The following table shows the quantities sold, or distributed :—

	Sold at reduced retail price.	Sold at half reduced retail price.	Distributed free.
Dried Milk... ..	23,273 lbs.	5,470 lbs.	46,219 lbs.
Cocoa Milk	679 lbs.	119 lbs.	2,319 lbs.
Virol and Numol... ..	5,694 lbs.	138 lbs.	1,993 lbs.
Maltoline, etc.	12 lbs.	—	—

The following table indicates the cost to the County of supplying these foods, etc., free or at half price, also the amount spent during the year by purchasers :—

	Purchased by Parents.		Cost to the County Council.	
	At reduced retail price.	At half reduced retail price.	At half reduced retail price.	Free.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Dried Milk	1,163 13 0	136 15 0	125 7 1	2,212 11 7
Cocoa Milk	48 1 11	4 9 3	3 4 6	149 15 4
Virol and Numol... ..	435 9 0	5 4 7	4 1 7	131 0 2
Maltoline, etc.	14 0	—	—	—
Totals	1,647 17 11	146 8 10	132 13 2	2,493 7 1

National Birthday Trust Fund.

In the Haltwhistle and Seaton Valley districts, advantage was taken of the Nutrition Scheme operated under the auspices of the National Birthday Trust Fund. The administration of this is controlled by the Research Committee of the Joint Council of Midwives and applicable to distressed areas only.

Milk, cocoa and yeast extract were received each month and distributed to Ante-natal and Nursing mothers whose husbands were unemployed.

Dental Treatment.

A comprehensive scheme for dental treatment, which includes the whole of the Public Health Services has been adopted in the County. It provide

a co-ordinated dental service which covers the treatment of patients for whom the following Committees are responsible :—

Education Committee.

Maternity and Child Welfare and Midwives Committee.

Public Health and Housing Committee.

Blind Persons Act Committee.

Public Assistance Committee.

Committee for the Care of the Mentally Defective.

The School Dental Staff consists of eleven Dental Officers, including a Senior Dental Officer. It is proposed eventually to augment the number by two, making a total staff of thirteen. An additional Dental Officer has been recruited to this staff, and the remainder of the Committees who co-operate in the scheme pay their respective individual portions of his salary to the Education Committee, in the following proportion :—

Maternity and Child Welfare Committee...	...	9/10
Other Committees ... ..	...	1/10

These Committees are also responsible for the salary and expenses of one Dental Attendant, and for their share of the expenditure on travelling expenses, upkeep and replacement of equipment.

Maternity and Child Welfare Service.

Dental treatment is provided for expectant mothers at any stage of pregnancy, nursing mothers, and children up to the age of five years. It is carried out at fixed clinics in more populous areas, and at mobile clinics in the rural areas. These mobile clinics are made possible by the use of motor car trailers suitably fitted. Similarly, up-to-date dental equipment has been provided at all the fixed clinics. Regular sessions are now in operation in every area of the County.

Patients must be in regular attendance at a Child Welfare Centre or Ante-natal Clinic, and applications for treatment must be accompanied by a recommendation form signed by the Medical Officer in attendance.

Fees are recovered from the patients if their circumstances permit. Dental treatment for expectant and nursing mothers consists very largely of extractions and the fitting of dentures. These are provided at a fixed price, the amount to be contributed by the patient being determined by means of an income scale which makes allowance for rent and number in family.

The following indicates the work done :—

	Attendances made.	Extractions.	Scalings.	Fillings.	Other Operations.	Repairs and adjustments.	Impressions.	Try-ins.	Bites.	Local anaesthetics.	General anaesthetics.
Mothers ...	1,069	2,270	57	46	36	61	186	110	96	2,168	6
Children ...	90	303	—	4	14	—	—	—	—	122	20

The sum of £116 12s. 10d. was collected in fees.

Ophthalmic Treatment.

In accordance with recommendations contained in Circular 1621, issued by the Ministry of Health, and having relation to the scheme for the Prevention of Blindness, arrangements have been made for children under

the age of five years suffering from eye defects to have expert medical attention. For this purpose the part-time services of an Ophthalmic Surgeon are employed. Expert examination of the fundus of the eye in cases of failure of reading sight during pregnancy is also available.

All arrangements for ophthalmic treatment for expectant or nursing mothers, or children under the age of five years are made on the recommendation of the medical officers in attendance at the Child Welfare Centres or Ante-natal Clinics.

Prevention of Deafness.

Facilities are provided under this scheme for the treatment of defects and diseases of the nose and throat, at the Rye Hill Hospital, and the Alnwick Infirmary. Removal of Tonsils and Adenoids, and cases requiring operative treatment for Mastoid disease are also referred for treatment at a fee agreed upon by the Council.

Under this scheme 96 children received treatment during the year. It is satisfactory to note that parents are anxious to take advantage of these facilities and an increased number of children suffering from defects received treatment.

Diphtheria Immunisation of Pre-school Children.

Facilities for immunisation of pre-school children against diphtheria were provided for the first time at Child Welfare Centres in the County in 1936. Leaflets pointing out the value of preventive measures against diphtheria were distributed at the Centres. The response was not encouraging in the first instance but progress has been made since then.

Parents who wish their children to be immunised are required to complete the consent card and special sessions are arranged when sufficient numbers of these have been received. The immunisation is done by Medical Officers in attendance at the Centres, who, in the majority of instances are the Medical Practitioners in practice in the district. During the year 1938 a total of 241 children under the age of 5 years were immunised at the Child Welfare Centres. Records are kept of the dates of injection and dosage for each child on individual record cards, and these are available for the School Medical Service when the child reaches the age of 5 years.

Detection, Prevention and Treatment of Crippling in Infants.

The County Council's Maternity and Child Welfare Scheme provides for the diagnosis and treatment of orthopaedic defects at the Clinics established at six Centres, or, if necessary, at the home of the patient. When hospital treatment is indicated the child is received into the W. J. Sanderson Orthopaedic Hospital School for Crippled Children, Gosforth. Eight cases were treated in hospital, 3 of which were admitted during the year. Cases requiring treatment are usually referred by medical practitioners, district nurses, and midwives to the Clinics established below :—

Clinic established.						Individual cases attending during the year.
Alnwick	...	...	...	...	...	67
Ashington	...	...	...	...	...	59
Bedlington	...	...	...	...	...	16
Morpeth and Rothbury	...	...	...	...	...	62
Gosforth and Cramlington	...	...	...	...	...	34
Hexham and Prudhoe	...	...	...	...	...	94

Convalescent Treatment of Mothers.

This continues to be one of the most valuable services provided by the Council. Mothers who are in attendance at one of the ante-natal clinics or child welfare centres, and who are certified to be suffering from some debility or illness associated with pregnancy, or childbirth, are offered two weeks rest in the country or at the seaside at carefully selected lodgings in Newbiggin-by-the-Sea, Wark-on-Tyne. Wooler, and at the Rest House, Whalton.

During the year 89 mothers were sent.

Birth Control.

The arrangements with regard to birth control remained the same as were in operation during the previous year. No change is reported in the administration of Birth Control Institutions. These are established in Ashington and Newcastle and each is controlled by a Voluntary Committee. Women attending the Child Welfare Centres in whom further pregnancies would be detrimental to health are referred to their own doctor, who may instruct them to seek the advice offered at these Clinics. At the time of writing a fee of 15/- is paid for consultation and provision of appliances in each case. Advice is not given at the Child Welfare Centres controlled by the County Council.

Babies' Hospital, West Parade, Newcastle upon Tyne.

This hospital admits babies suffering from congenital defects, infantile ailments and tuberculosis. Patients are admitted on the recommendation of their own medical attendants and during the year 23 children were treated. An annual grant of £300 is made to the hospital.

Public Health Act.—Child Life Protection.

All children under the age of nine years maintained for reward, apart from their parents, or who have no parents, must be kept under supervision. The Council's Health Visitors act in their respective districts and supervise the health welfare of these children.

At the beginning of the year twenty foster-mothers were registered, each having one child in her care. During the year a further six foster-mothers were registered, each of whom received one child; one child was returned to the care of her mother. Three children reached the age of nine years, one left the County with the foster-mother, and one was legally adopted.

At the end of the year there were twenty women registered as foster-mothers, each having one child under her care.

Health Visitors made 131 visits of supervision to the homes.

Resident Nursery, Hextol Terrace, Hexham.

A serious epidemic occurred at the Resident Nursery, Hextol Terrace, Hexham, in November, 1938, as a result of which six children died. The total number of children residing in the Nursery at the time was thirty-three.

The matron of such an institution is required, under Section 213 of the Public Health Act, 1936, to notify the Coroner of any deaths which may occur. On Wednesday, 2nd November, the County Medical Officer was informed that a death had occurred at the Nursery and that the Coroner had been informed. A diagnosis of enteritis having been established, a certificate to that effect was accepted from the Medical Officer of the

Institution, and no further enquiry was considered necessary. Three days later, however, notification of a second death was received, also certified to be due to enteritis and on enquiry it was learned that there were four further cases. The District Medical Officer of Health was immediately notified, and investigations into any possible source of infection were put into operation without delay with a view to preventing the occurrence of further cases. At the same time the remaining four cases were put into strict isolation and rigorous precautions were taken to prevent any possibility of contact with the remainder of the children. Two days later, notification of a third death was received, and on inquiry at the institution it was learned that two further deaths had occurred. All five deaths at the institution therefore occurred within one week, the last three within two days, and in no case was the duration of the illness longer than three days.

Arrangements were made in conjunction with the Medical Officer of the Institution and the District Medical Officer of Health for two remaining cases and two suspect cases to be removed to Walker Gate Hospital. At the same time it was evident that the infection was intensely acute, and that drastic action would be necessary to prevent the occurrence of further cases. It was decided that the entire building should be evacuated and the remainder of the children were removed to hospital, the cost of maintenance there being borne by the County Council.

One of the four infected children who were removed to hospital died but no further cases developed amongst the children who were evacuated.

Post mortem examination of the bodies of the last three cases revealed signs of acute pneumonia, and the *Bacillus Staphylococcus Aureus* was isolated from the lung exudate in one case.

An investigation into all the circumstances of the epidemic was conducted by the Officers of the Ministry of Health, but no definite conclusion was reached as to the source or nature of the infection.

Registration of Nursing Homes.

It is one of the duties of a Local Supervising Authority to ensure that all nursing homes in the area are registered unless exemption is granted for any reason.

When application is made to the Authority for registration the home must be inspected and approved before this is granted.

One new application was received during 1938, making a total of seven in the County. All the homes complied with the conditions required and were registered.

Care of the Mentally Defective.

The home visiting of the Mentally Defectives under Guardianship was transferred in April to the Health Visiting Staff. On 1st July, 1938, there were about 110 such cases in the County and 191 visits were made during the year.

Professional Nursing in the Home.

The County Council do not, themselves, employ nurses: this work continues to be carried out by the County Nursing Association to whom grants are made for this purpose. Close co-operation exists between the County's staff of Health Visitors and the district midwives, some of whom are associated with the Child Welfare Centres and Ante-natal Clinics. Where this co-operation exists a valuable service is assured to the mother and child.

Infectious Diseases.

Nursing of the notifiable infectious diseases is not usually undertaken by the County Nursing Association, except in the more remote parts of the County where the resident system of nursing is in vogue, and in those cases of infection directly associated with midwifery.

ORTHOPAEDIC TREATMENT.

Provision continued to be made during the year for the treatment of patients of all ages suffering from Orthopaedic defects, with the exception of adults showing active tubercular symptoms. Institutional treatment was provided at the W. J. Sanderson Home, Gosforth, for children, and at the Shropshire Orthopaedic Hospital, Oswestry, for adults; during the year two adults received treatment at this Hospital.

The following Clinics were in operation at the end of the year :—

- Alnwick—The Infirmary.
- Ashington—The School Clinic, Lintonville Terrace.
- Bedlington—Welfare Centre, Guide Post.
- Cramlington—26, Hawthorn Villas.
- Gosforth—War Memorial Hospital.
- Hexham—War Memorial Hospital.
- Morpeth—Church Hall.
- Prudhoe—Child Welfare Centre.
- Rothbury—Jubilee Hall.

Those Authorities which are autonomous for Maternity and Child Welfare purposes make their own arrangements for institutional treatment; the County Council Orthopaedic Clinics, however, are available for patients resident in these areas and the respective Authorities pay 2/6 per attendance for each case received and treated; this charge covers massage, the application of plaster bandages and examination by the Orthopaedic Surgeon, but does not include the provision of splints or any medical treatment outside the Clinic.

BLIND PERSONS ACT COMMITTEE.

Administration.

The Blind Persons Acts continue to be directly administered by the County Council.

There were 482 blind persons on the register on January 1st, 1938, as compared with 481 the preceding January. During the year 89 persons were registered, 13 were de-certified while 48 died or left the County. On December 31st, there were 510 names on the register, an increase of 28 during the year. The number of persons de-certified includes those whose vision was restored by operative treatment, either under the Council's scheme for the prevention of blindness, or in the wards of the Royal Victoria Infirmary or the Newcastle upon Tyne Eye Hospital.

Applicants for registration are examined by the Council's Ophthalmic Surgeon, who is in charge of beds at the Newcastle upon Tyne Eye Hospital (this service being in accordance with the recommendation contained in Circular 1353 of the Ministry of Health). A fee of 25/- is paid for each examination and certification, Form B.D.8 being used. The arrangements which were in force in previous years for the examination of bed-fast and senile patients are still in operation, the patients being either visited by the ophthalmic surgeon in their own homes, or brought to his consulting room by motor car by a home visitor.

During the year 183 persons were examined by the Ophthalmic Surgeon, 104 being certified blind and 79 not blind. Of those certified blind, 84 were admitted to the Council's register, 20 having been on the register prior to examination. Of those certified not blind, two had hitherto been regarded as blind and their names were removed from the register.

Domiciliary Assistance.

The Blind Persons Act Committee continues to be responsible for the provision of domiciliary assistance to unemployable and other necessitous blind persons ordinarily resident within the Administrative County of Northumberland.

The Committee re-drafted the regulations which had hitherto existed to meet the requirements of the Blind Persons Act of 1938. The new regulations provide that, subject to certain conditions, the income of an unemployable blind person over the age of 21 years should be made up to 20/- per week, and the incomes of blind persons between the ages of 18 and 21 years should be made up to 18/- per week. In the case of a blind householder living alone his or her income is made up to 22/- per week. An allowance for rent may also be made where an excessive amount is being paid.

In December, 1938, 218 blind persons were in receipt of domiciliary assistance as compared with 184 at the beginning of the year. During 1938, 255 blind persons received domiciliary assistance as compared with 232 in 1937, the total sum distributed amounting to £4,880 8s. 6d.

Under the Blind Persons Act of 1938 registered blind persons become entitled to Old Age Pension at the age of 40; hitherto the age has been 50 years.

Sighted Dependants of Blind Persons.

In accordance with the provisions of the new Act, the Blind Persons Act Committee became responsible by statute for assistance granted by them to the sighted dependants of blind persons. Formerly the Committee acted as the agents of the Public Assistance Committee so far as these dependants were concerned.

Twenty-seven blind persons were in receipt of such an allowance in respect of their dependants in December, 1938. The total sum distributed during the year amounted to £648 19s. 1d.

Home Visitors.

During 1938 three home visitors were employed by the County Council, two of whom were provided with motor cars. The home visitors visit all blind people regularly in their homes, supervise their welfare and render assistance in a variety of ways. They investigate every case referred to the County Medical Officer, supplying the necessary forms of application for registration, financial assistance, etc. Those persons who are in receipt of domiciliary assistance or dependants' allowances, require to be visited more frequently, it being necessary to review the circumstances regularly. Braille and Moon type reading and handicrafts, such as rug-making, hand-knitting and basket making, are taught to such individuals as are likely to profit from instruction. The subjects taught are, however, more in the nature of pastime occupations.

Patients who are on the Prevention of Blindness Register are also visited as frequently as possible by the home visitors to ensure that any necessary treatment is being carried out.

During the year 1938, the following visits were paid by the three home visitors :—

No. of visits for welfare purposes	...	...	...	5,331
„ „ to supervise home workers	...	...	...	218
„ „ to give lessons	...	...	...	79
„ „ to investigate new cases	...	...	...	161
„ „ re Prevention of Blindness	...	...	...	113
„ „ re provision of spectacles...	...	...	...	178
				<hr/> 6,080 <hr/>

The duties of the home teachers have increased considerably and towards the end of the year the Blind Persons Act Committee submitted a recommendation to the County Council to the effect that an additional home visitor should be appointed.

Prevention of Blindness.

During the year, 14 patients were admitted to the Newcastle upon Tyne Eye Hospital or the Royal Victoria Infirmary for operative treatment under the Council's scheme for the prevention of blindness. Nine were certified by the operating surgeons to be no longer blind as the result of treatment, and their names were removed from the Register; in one case it was stated that a very happy change had taken place in the patient's mentality since her vision was restored. One child, aged 10 years, was found to be suffering from word blindness and was given a prescription for spectacles, no operation being advised. One patient, a man aged 69 years, remained only two days in hospital; he refused operation and returned home. One patient, who received treatment in December, 1938, afterwards contracted a serious illness, which has so far prevented her from resuming her attendance at the hospital as an out-patient. One patient left the County before her treatment was completed, information regarding her condition and treatment having been forwarded to the Medical Officer of the district in which she now resides. The remaining patient, a man aged 77 years, unfortunately developed a choroidal haemorrhage after an operation for the removal of cataract, as a result of which he is now totally blind.

Notification of Persons Threatened with Blindness.

During 1938 the County Council decided to pay a fee of 2/6 to medical practitioners for the notification of persons threatened with blindness. Books of notification forms were prepared and one was sent to each medical practitioner and hospital in the County, together with a copy of the Council's arrangements for the prevention of blindness. The first notification was received in August, and up to December 31st, 1938, a total of 38 had been received. The majority of the patients were examined by the Council's Ophthalmic Surgeon. The following is a summary of the information obtained :—

(a) Patients certified to be blind and registered under the Blind Persons Act	...	...	...	...	10
(b) Patients certified to be not at present blind, but requiring to be kept under observation or treatment, and whose names were added to the Prevention of Blindness Register	...	...	...	...	20
(c) Patients certified to be not blind	...	...	...	...	7
(d) Died before investigations were completed	...	...	...	...	1
					<hr/> 38 <hr/>

The following is a detailed report upon the individual patients dealt with :—

Certified to be blind within the meaning of the Blind Persons Act.

(1) Mrs. E. B. (75 years), suffering from cataract. Admitted to the Newcastle upon Tyne Eye Hospital in January, 1939, for operative treatment under the Council's scheme for the prevention of blindness. Subsequently certified to be no longer blind; suitable spectacles provided; name removed from Register of Blind Persons.

(2) Mrs. J. B. (77 years), suffering from cataract. Ophthalmic Surgeon states operative treatment might restore vision and she is eager to have this, but medical attendant does not consider it advisable in view of her high blood pressure.

(3) Mrs. M. D. (74 years), suffering from cataract. Ophthalmic Surgeon states operative treatment would be likely to restore vision but her medical attendant does not consider it advisable as she suffers from chronic asthma.

(4) Mr. W. E. (68 years), suffering from cataract. Ophthalmic Surgeon states operative treatment when lenses are ripe is likely to restore useful vision. Arrangements will be made for his admission to hospital about May, 1939, under the Council's scheme for the prevention of blindness.

(5) Mrs. M. A. B. (78 years), suffering from cataract. Ophthalmic Surgeon states operative treatment is likely to restore vision if her medical attendant considers it advisable—has an enlarged thyroid.

(6) Mrs. M. D. (81 years), suffering from cataract. Examined by Ophthalmic Surgeon, in October, 1938, and February, 1939: operative treatment is likely to restore useful vision, but she is not willing and in view of her age no pressure can be put upon her.

(7) Mrs. S. J. (67 years). Cause of blindness—glaucoma.

(8) Mrs. E. H. (68 years). Cause of blindness—diabetes. Is being supplied with Insulin (20 units per day) by the County Council at a special price—6d. per 100 units. The Ophthalmic Surgeon stated that operative treatment when the lenses were ripe might restore vision. Mrs. H. has been attending a Newcastle Hospital for treatment, and in March, 1939, was admitted for operation: it is not yet known whether she is still blind within the meaning of the Blind Persons Act.

(9) Mr. G. D. (85 years). Cause of blindness—choroidal-retinal degeneration with displacement of retinal pigment; cataract.

(10) Mrs. H. (36 years). Cause of blindness—congenital syphilis. Has attended the Special Treatment Clinic for four years; stated by the Medical Officer to be non-contagious and suitable for admission to an institution, but up to the present she has refused to go.

Patients requiring to be kept under observation.

(11) Mr. J. G. (69 years), suffering from glaucoma. Ophthalmic Surgeon stated each eye ought to be trephined as soon as possible, and the patient was admitted to the Newcastle upon Tyne Eye Hospital under the Council's arrangements for the prevention of blindness. Suitable spectacles will be provided at a later date.

(12) W. H. (boy, aged 10 years)—congenital cataract. Is attending Hospital in Newcastle; operative treatment not advised at present. Is also under the supervision of the School Medical Officer.

(13) Mrs. I. L. (73 years)—cataract. Has been provided with suitable spectacles free of charge by the County Council. Operative treatment will be considered at a later date if necessary.

(14) Mr. J. E. (64 years)—cataract in right eye. Employed at present. Operative treatment to be carried out when lens is ripe.

(15) Mrs. L. L. (85 years)—cataract. Attends a Newcastle Hospital, being brought in by car; is awaiting operative treatment. In comfortable circumstances and does not require assistance.

(16) Mr. J. F. (67 years)—cataract. Is attending Hospital in Newcastle, travelling vouchers being supplied by County Council. Operative treatment will be carried out when necessary.

(17) Mr. F. O. (76 years)—cataract. Operative treatment will be carried out when lenses are ripe.

(18) Mr. J. C. (61 years)—myopic error, ? detachment of retina, cataract. Has suitable spectacles prescribed at Newcastle upon Tyne Eye Hospital. Is in comfortable circumstances and can afford to pay his own travelling expenses to Hospital. Will be re-examined by Ophthalmic Surgeon in twelve months.

(19) Mrs. E. H. (75 years)—myopic error and cataract. Will be re-examined by Ophthalmic Surgeon if vision fails.

(20) Mrs. R. H. (72)—myopic error and cataract. Provided with suitable spectacles free of charge by County Council. Will be re-examined if vision fails.

(21) Mrs. E. P. (64 years)—myopic error and cataract. Will be re-examined if vision fails. In poor health.

(22) Mr. F. T. (71 years)—cataract. Has had right lens extracted. Is attending Hospital in Newcastle and will have operation on left eye when necessary.

(23) Mrs. W. (47 years)—? acquired syphilis. Also suffers from diabetes and requires 24 units of Insulin per day. Report obtained from medical attendant and at his request further advice obtained from Medical Officer of Special Treatment Clinic with regard to treatment.

(24) Mr. R. W. (61 years). Right eye removed after accident; left eye ulcerated. Is under treatment at a Newcastle Hospital and expects to return to work shortly.

(25) Mrs. S. W. (58 years)—non-industrial trauma; cataract. Suitable spectacles provided free of charge by County Council. Operative treatment will be considered at a later date when right lens is ripe.

(26) Mr. P. (25 years)—industrial trauma; ? congenital syphilis. Is attending the Special Treatment Clinic and is also being supplied with free travelling vouchers to enable him to attend the Newcastle upon Tyne Eye Hospital when required.

(27) Mr. T. S. (49 years)—R. cornea; traumatic central ulcer (healing). Was an in-patient in Newcastle upon Tyne Eye Hospital. Eye healing well after accident. Expects to commence work shortly.

(28) Mrs. S. H. (65 years)—irido-cyclitis. Has been under treatment at Newcastle upon Tyne Eye Hospital. Refuses examination by Ophthalmic Surgeon. In comfortable circumstances.

(29) Mr. F. C. (58 years)—corneal ulcers. Is under treatment at the Newcastle upon Tyne Eye Hospital. In employment.

(30) Miss I. C. (18 years)—Eales' disease. Referred to Tuberculosis Department for examination; X-ray showed evidence of healed tuberculous foci in root of each lung, but no evidence of active clinical tuberculosis. Ophthalmic Surgeon states she may become blind at any time, and the Education Committee will be asked to accept responsibility for her vocational training in an institution for the blind.

Certified to be not Blind.

(31) Mr. W. C. (64 years). Right eye removed as result of old injury. Under treatment at Newcastle upon Tyne Eye Hospital. Expects to return to work shortly.

(32) Mr. A. M. (62 years) suffering from diabetes. Is under treatment at Newcastle upon Tyne Eye Hospital, being brought in by car. Insulin is obtained at a wholesale price through a relative. Is in comfortable circumstances and does not require assistance from the County Council.

(33) Mr. R. P. (81 years)—myopic error and cataract. Has reasonably good sight in right eye and does not want spectacles. No useful purpose would be served by operation owing to senility.

(34) Mrs. S. (81 years)—cataract. No useful purpose would be served by operation owing to senility. In comfortable circumstances.

(35) Miss M. P. (88 years)—senile decay. Very frail.

(36) Miss E. R. (75 years)—hypermetropia. Provided with spectacles by County Council free of charge.

(37) Mr. H. T. (46 years)—myopic error. Provided with spectacles by County Council free of charge. Likely to retain useful vision.

Provision of Spectacles (Adults).

Some concern was caused by reports received that spectacles were being purchased by many individuals in the area from multiple stores without any test being made, the customer merely choosing the pair with which he thought he could see best. It was realised that grave danger to eyesight might result from this practice, and that glaucoma would remain undiagnosed and untreated and blindness would ensue.

Complaints were also received from practically every area in the County that peddling opticians were visiting the towns and villages, going from door to door, giving very inadequate tests, and selling spectacles to poor people at exorbitant prices on the instalment system. After one or two instalments had been made the debt was handed over to a second firm of itinerant Drapers, who collected the balance and endeavoured to sell other goods, thus perpetuating a vicious circle. In many cases it was stated that the spectacles supplied were quite useless and the frames and lenses of poor quality.

To assist people who could not afford to pay the fee of a private practitioner to obtain properly prescribed spectacles at a reasonable cost, the County Council entered into an arrangement with two ophthalmic surgeons in Newcastle to hold Refraction Clinics in various parts of the County as and when required, the County Council paying their fees and travelling expenses. An agreement was also entered into with the Northumberland and North Durham Local Association of Ophthalmic Opticians to supply

spectacles in nickel frames at 5/-, 6/- or 7/- according to the lenses prescribed. The optician attends the Refraction Clinic, fits the frames, and submits his quotation to the County Medical Officer, who arranges for the cost to be collected by instalments, or for the spectacles to be supplied free or at a reduced rate if necessary.

Applicants from the County area immediately adjacent to Newcastle are asked to attend the Newcastle upon Tyne Eye Hospital for eye-testing, a fee being paid by the Council to the Hospital for each attendance made.

The above scheme is for the benefit of individuals in poor circumstances, who are not entitled to ophthalmic benefit under the National Health Insurance Acts, and who are unable to avail themselves of the facilities offered by the National Ophthalmic Treatment Board. Before an appointment is made for attendance at a Clinic or the Eye Hospital, enquiries are made into the financial circumstances of the applicant and his household.

Many patients have been referred by the Health Visitors on the staff of the County Council, the Home Visitors for the Blind and the Relieving Officers, and as the scheme is becoming known applications are being received for appointments. Up to the present practically 100 per cent. of the appointments made have been kept.

The chief difficulty encountered is the amount of time taken up by the Home Visiting staff in making preliminary investigations *re* financial circumstances, attending the Clinics to render assistance to the Ophthalmic Surgeon, and afterwards in collecting payment for the spectacles by instalments. It has also become evident that all patients should be visited to make sure that they are wearing the spectacles which have been supplied, and to persuade them to persevere until full benefit is obtained. In some cases it has been found that the patient has tried on the spectacles, does not find them immediately comfortable and easy to use, puts them away in a drawer and continues to wear his original glasses.

It has also been found that many patients (more particularly the women) who are recommended to wear their spectacles constantly, refuse to have nickel frames and insist upon imitation shell. These are being quoted at about 11/6 per pair, but in some instances many visits are necessary before this amount can be collected. It has been suggested that the Home Visitors should not be asked to collect instalments in these cases and that the patient should deal direct with the optician, but it is felt that only by making it possible for people to obtain spectacles on easy terms will they be kept out of the hands of the peddling opticians.

Some applicants for the provision of spectacles have been found to be suffering from serious diseases of the eye and have been referred to Hospital for treatment. One man has been certified to be blind within the meaning of the Blind Persons Act, and the names of several have been added to the Council's Prevention of Blindness Register. Two patients suffering from neurasthenia and blepharitis respectively are continuing to attend the Hospital for treatment and have been referred to the Public Assistance Committee for assistance as they cannot be dealt with under the Prevention of Blindness scheme.

One problem which remains to be dealt with is that of the bed-ridden patient who is unable to attend a Refraction Clinic. One or two have been examined in their own homes by the Ophthalmic Surgeon, but the time taken up approximates to half a session and the cost is high. It is obvious, however, that these people require all the help which can be given, and when it is possible to estimate the number likely to require examination, it is hoped to put some scheme into operation. In the meantime cases are being dealt with as they arise.

Prismatic spectacles (to the prescription of the Ophthalmic Surgeon), suitable for an invalid with spinal trouble, were supplied to a man aged 48 years who has been bed-ridden for some years as the result of Rheumatoid Arthritis, being only able to raise his head a short distance from the pillow but having fair use of his arms. They were greatly appreciated.

It is essential that every class of worker should be made to realise the necessity of eye protection, and with this in view, the County Council purchased a number of posters—issued jointly by the National Safety First Association and the Industrial Welfare Society. The posters, which illustrated and emphasised the importance of the protection of one's eyes, were despatched to secretaries of engineering works, trade unions, employers' associations and also Clerks of Urban District Councils, who arranged for their display in engineering works, collieries, shipyards, shops, recreation rooms, etc., about 200 posters being thus distributed.

Home and Casual Workers.

In January, 1938, there were four approved home workers in the County, but during the year it was decided that one man—a basket-maker, should cease to be regarded as a home-worker and should receive assistance as an unemployable blind person. In December there were three home-workers :—

Piano tuners	...	...	...	...	...	2
Machine knitter	...	...	...	...	...	1
						<hr/>
						3
						<hr/>

In January, 1938, there were 13 casual workers in the County: during the year one man was withdrawn from training at the Royal Victoria School and became a casual worker. Of the 14 casual workers, three were paid at a piece-work rate and eleven were in receipt of domiciliary assistance. Articles made by these workers include stools seated with seagrass and cane, straw shopping bags, trays, rugs, jumpers, babies' garments, etc. Materials are supplied through the Department of the County Medical Officer. In addition, one blind woman, who buys her own materials, makes fancy beaded goods and trinkets, many of which she sells privately. The Department, however, assists her in the disposal of a number of articles.

Sales of Goods.

Goods made by home workers are received at the office for sale. It has been found that the most effective way of disposal is by holding exhibitions and sales in various parts of the County. During 1938, such sales were held at Gosforth and Whitley Bay, while stalls were arranged at the Annual Shows of the Northumberland County Agricultural Society at Berwick, the Glendale Agricultural Society at Wooler and the Allendale Agricultural Society.

Many private orders are sent direct to the Department throughout the year, and the machine-knitter makes a number of socks and stockings for various Public Assistance Institutions in the County by contract with the Public Assistance Committee.

Workshops for the Adult Blind.

In January, 1938, 18 men and 7 women from the County area were employed in the Workshops for the Adult Blind, Newcastle. Four persons were admitted during the year and four terminated their employment; on December 31st there were 19 men and 6 women from the County in the Workshops.

The number of places originally reserved in the Workshops for County employees was 20, but it became evident that a greater number would be required and, as a temporary measure, the County Borough of Gateshead agreed to reduce the number of places reserved for them by five, in order that further employees from Northumberland could be accommodated, the amounts payable by each Authority being adjusted accordingly.

Owing to the higher standard of work and the increased output required of each employee since the payment of a minimum wage was put into operation, and the more careful selection (both mentally and physically) of applicants for Workshop training, it is not anticipated that these additional places will be required permanently.

Education.

Training was provided for 15 blind persons—8 women and 7 men—from the County during 1938, twelve of this number receiving training at the Royal Victoria School for the Blind. Two men continued their studies in music at the Royal Normal College, London, and one man was taking a Matriculation Course at the Worcester College for the Blind. Two of the trainees at the Royal Victoria School for the Blind completed their training during the year and commenced employment at the Workshops for the Adult Blind, Newcastle.

One partially blind boy received training at the Royal Victoria School for the Blind.

Financial assistance is afforded by the County Council during holiday periods to trainees in necessitous circumstances. Every applicant for training is examined by a member of the Council's medical staff before his or her application is considered by the Blind Persons Act Committee, special attention being given by the examiner to the candidate's physical state and intellectual capacity.

During the year 9 blind children and 1 partially blind child were receiving elementary education at the Royal School for the Blind, the Wallsend Education Committee being responsible for one of those blind.

Wireless for the Blind.

Under Section 1 of the Wireless Telegraphy (Blind Persons Facilities) Act, 1926, 50 certificates enabling blind persons to obtain free wireless licences were issued during the year.

The Department continues to distribute sets in the County on behalf of the British "Wireless for the Blind" Fund, and during the year 80 loud-speaker sets were allocated. A large percentage of blind persons have now been supplied with loud-speaker sets, the old earphone type being gradually eliminated.

Mr. A. E. George, of Newcastle, continued to assist in the overhaul of wireless sets and, together with Mr. M. B. Donkin of Blyth, and his assistant, did valuable work in this respect.

Homes for the Blind.

The Blind Persons Act Committee is responsible for the maintenance of three blind persons who are accommodated permanently in homes for the blind at Glasgow, Halifax and Leatherhead, respectively.

Social Welfare.

There were six Voluntary Societies for the Blind functioning in the County in 1938, at Ashington, Bedlington, Blyth, Seaton Valley, Morpeth and Wallsend. These Societies cater for the social welfare of the blind, organising concerts and musical evenings in the winter and picnics and other

outings during the summer. For the seventh consecutive year, Mr. and Mrs. Thompson, of Hartford Hall, near Bedlington, entertained the blind persons connected with the various voluntary societies (and their guides) at a garden party in the grounds of their home. This function is much appreciated and has become a date of importance in the calendar of many blind folk.

Cheques amounting to £425 1s. 6d. were received from the National Institute for the Blind during 1938, being the amount allocated to the Northumberland County Blind Persons Trust Fund from collections made in the area.

The County Council had hitherto made a grant of £100 per annum; it was, however, decided to give such a sum as would, with the above gift, place at the disposal of the Trust Fund Committee an amount equal to £1 per head for each blind person on the Register at the end of the financial year.

Ten shillings per blind person was allocated during the summer months and a similar amount was distributed at Christmas. Where voluntary societies existed, grants were made to the Committees according to the number of blind persons in the area. All other blind persons received the amounts in cash.

Library for the Blind.

Books are supplied to blind people in the County by the National Library for the Blind, Manchester. During the year 47 readers borrowed 1,050 volumes. Compared with 1937, the number of books borrowed has decreased by 74 and the number of readers has increased by one.

Dental Treatment.

The County dental surgeons continue to give treatment at the Dental Clinics and in the dental vans to blind persons, the Blind Persons Act Committee being responsible for the cost. During the year 18 blind persons received treatment entailing 40 attendances, while one man on the Prevention of Blindness Register made three attendances. Artificial dentures were supplied where necessary at special prices.

AIR RAID PRECAUTIONS.

It would seem desirable to put on record some statement of the development of Air Raid Precautions in this County. For the first time for a considerable period in English history the civilian population is confronted with the possibility of becoming the object of enemy attack and that too from a method hitherto never experienced in England.

It is not necessary to enter into any details as to the legislative and administrative struggles which preceded the actual commencement of the work, but it is worth while noting that from its very inception it has been invested with a curious psychology, which has increased very materially the difficulties of those whose duties are to formulate schemes and to carry them into execution.

There was very great reluctance amongst a certain section of the community to acknowledge the necessity for taking even elementary precautions whilst those who advocated their necessity were regarded as war-mongers and enemies to the cause of peace; it was contended that by such action a lack of faith in the efforts of the League of Nations was demonstrated and that it was illogical to preach peace and make provision against air attack simultaneously. Another difficulty of

very great complexity is the attitude of mind of the individual who regards anything connected with the subject as an essential military matter and that none but those possessed of military experience and training are capable of organising the necessary schemes for the protection of the civil community. If that attitude be correct it would appear that civil defence ought to be undertaken by the army authorities and all responsibility removed from the Local Authorities.

The third real obstacle to progress was unwillingness of the Central Authorities to regard the work as a national charge. Looking back on the past five years it is surprising how much had to be done in order to arouse interest and to stimulate the public to take measures to protect themselves.

Four years ago one approached this subject with great trepidation. It was difficult for an individual nearing the end of his official career to visualise an absolutely novel situation which seemed to suggest that a quasi-military problem should be grafted with all possible speed upon the already inadequate hospital system of the country. Public opinion was unready and disinclined to accept the view that it was the duty of the civil community to make provision for its own defence.

Circulars were received from the Home Office and conferences were held with representatives of the department. Attempts were made to collaborate with neighbouring local authorities. These were not very successful. It has become increasingly evident, however, that with the exception of certain contingencies it is desirable for each authority to work out its own scheme in its own way, always remembering that an enemy raider would take no regard of boundaries which are more or less of an artificial nature and that the occasion might arise when the facilities and resources of one area must for humanity's sake be made available for another.

With a view to obtaining a better grip of the problem the County Medical Officer, in his capacity of County Surgeon of The St. John Ambulance Brigade, attended one of the intensive week-end courses organised by that body and held at the Great Central Hotel in Marylebone; by so doing he qualified as a First Grade Instructor under the Brigade's Scheme. The magnitude of the task was then realised and it was decided that more of the departmental officers should be trained and accordingly Lt.-Colonel W. L. M. Gabriel, the Senior Assistant County Medical Officer and Mr. C. Ward, the Senior County Health Inspector were sent to the Government Civilian Anti-gas School at Falfield, Gloucestershire.

Colonel Gabriel attended the short course for Officials; Mr. Ward attended the full course and obtained the 1st Grade Instructor's certificate. At a later date the County Medical Officer attended this course and also obtained the 1st Grade certificate.

The following Report was submitted by the County Medical Officer to the Air Raid Precautions Committee at a meeting held in his office on August 1st, 1935, following the Quarterly Meeting of the County Council. Major General G. Walker, C.B., C.B.E., D.S.O., in the chair :—

AIR RAID PRECAUTIONS.

FIRST AID AND HOSPITAL ORGANISATION.

Consideration of the relative tactical importance of different parts of the County of Northumberland indicates that the density of First Aid and Hospital Organisation will be greatest in the East and South East parts of the County.

For the purpose of this organisation the County may be divided as follows :—

- (a) "*Area of Special Danger.*" The land lying East and South of a line AMBLE-MORPETH-PONTELAND-HEDDON-OVINGHAM-RIDING MILL, all inclusive. This area contains a population of approximately 650,000, or about 86% of the total population of the County. It includes almost all the mining, engineering and shipbuilding districts and zones of dense population, and will require intensive precautionary organisation.
- (b) "*Area of Intermediate Danger.*" The land lying West of the line mentioned in (a) as far as a line BERWICK-CORNHILL-WOOLER-GLANTON-WELDON BRIDGE-CAMBO-CHOLLERTON-BROOM-LEE-GILSLAND, all inclusive. This area has a population of approximately 73,000, or 9.6% of that of the whole County. It contains some scattered coal-mines and residential areas and many farms. Any form of precautionary organisation required in this area should be of a modified nature but essentially mobile in character.
- (c) "*Area of Negligible Danger.*" All that part of the County lying to the West of the BERWICK-WOOLER-WELDON BRIDGE-CHOLLERTON-GILSLAND line mentioned in (b). This area is very large, it has a population of 34,000 mainly in scattered farms and small villages. It is doubtful whether any special organisation is needed here beyond one or two mobile units; even these would hardly be necessary if this area could call on the neighbouring one in case of emergency.

It can be accepted that in war the defined Area of Special Danger would be the actual object of enemy action and that the Area of Intermediate Danger would only receive attention from attacking aircraft as a result of miscalculation of position or a desire to unload bombs when retiring. The Area of Negligible Danger would probably remain entirely outside the scope of enemy action as it has no strategic value whatever. These relative values have been taken into account in drawing up the suggested organisation detailed below.

A model organisation for a County Borough which, with some modification, is also applicable to a County is laid down in Home Office Memorandum A.R.P. 1. By subdividing the County into areas of a suitable size for administrative purposes and at the same time retaining, in most cases, Urban and Rural District entities it is possible to follow the model organisation fairly closely. The chief modification, as may be expected in a County, lies in increasing the mobility of units by the provision of sufficient motor transport. This may be an apparent extravagance but is actually an economy in that it means that fewer First Aid and Decontamination Centres will be required. These centres are expensive to build and equip, and require a large staff.

The chain of evacuation of casualties is as follows :—

- (1) *Mobile First Aid Parties.* These parties, each consisting of a trained stretcher squad of four men, go to the bombed places and collect wounded or gassed persons. Where possible they should be posted at Police or Fire-stations, Colliery Ambulance Stations or any such convenient places to which information of casualties can be sent rapidly by telephone or messenger. A party should have a motor-ambulance at call and should have available a light open motor-lorry for the rapid conveyance of the party to the raided area and for the removal of contaminated cases not of an ambulance nature. After collection and emergency first-aid casualties are removed to a

- (2) *First Aid and Decontamination Centre.* Here more thorough first-aid treatment will be given and decontamination of affected persons and clothing, etc., carried out. Casualties will be sorted out, those who are able to go to their own homes will be allowed to do so, those who require hospital treatment will be conveyed to Casualty Clearing Hospitals.

The suggested staff, equipment, and general lay-out of a combined First Aid and Decontamination Centre are given in Appendix D to A.R.P. Handbook No. 2, and it is pointed out that separate Centres will be required for men and women. It has been estimated that a single Centre of the kind illustrated in the Handbook would cost about £3,000 to build, and duplication of the Centre for the two sexes would double the cost. The staff of a single Centre is 29 per shift, and it would be essential to keep it available day and night. Working twelve-hour shifts the staff of a duplicate Centre would be 116 persons (4 officers, 32 trained and 76 untrained personnel and 4 engineers).

This very high initial cost of Centres makes it advisable to explore in the County the possibility of adapting existing buildings or making use of anything in the nature of derelict schools, etc.

It will also be necessary at these Centres to make or to have available laundry provision for the decontamination of clothing, and arrangements for the issue of a change of clothing if it cannot be obtained from the patient's home.

From the First Aid and Decontamination Centre wounded and gassed patients who require hospital treatment will be transferred by ambulance to a Casualty Clearing Hospital.

- (3) *Casualty Clearing Hospitals.* These will usually be the civil hospitals normally serving each area. Most of the Hospitals in the County are in the "Area of Special Danger" and will be liable to a sudden influx of casualties, possibly in large numbers, at any time and this on top of their normal quota of sick persons. It is, therefore, undesirable to expect the retention at these hospitals of any casualties except those who are too ill to be moved. All those who are fit for removal should be concentrated in Base Hospitals.

Hospital Accommodation. This is dealt with in a later part of this report and is a matter of extreme importance.

In the Schedules which follow hereafter, suggestions are put forward for suitable areas for the sub-division of the County and for the general organisation of each area. Details such as the actual sites of First Aid Depots, etc., are of course a matter for discussion with the Local Authorities concerned, but the schedules serve to give an estimate of the number required of each kind of unit.

It will be seen that the scheme as laid out requires 75 First Aid Parties to be on duty at one time, excluding reserves. If these parties are "at call" for twelve-hour shifts it will be necessary to train twice that number and each depot should have one reserve party. Altogether, therefore, it will be necessary to have 225 trained First Aid Parties, a total of 900 persons.

At least 20 First Aid and Decontamination Centres will be required. On the establishment laid down in A.R.P. Handbook No. 2 the total staff required to work twelve-hour shifts would be 2,320 persons.

The requirements laid down in these schedules would appear to be the minimum to afford adequate service and some localities may demand more First Aid Parties

No information is available at present as to the organisation contemplated in the City of Newcastle upon Tyne which will presumably be self-contained up to the Casualty Clearing Hospital stage. It seems possible that Newcastle will need outside accommodation for Base Hospital purposes in which case it would be an economy for Newcastle and Northumberland to co-operate in that respect.

Area No.	Constituent Parts.	Population.	Acreage.	Density per acre.	First Aid Parties.		First Aid and Decontamination Centres.	Casualty Clearing Hospitals.	Motor Ambulances.	
					No. in Depot.	Located at			No.	Where kept.
I	Berwick B. ...	12,250	6,399	1.9	1	Berwick ...	1 at Berwick ...	Berwick Infirmary	1	Owned by Local Authority.
	Norham R.D. ...	4,974	47,049	.1	1	Wooler (Mobile)	1 at Wooler P.A. Institution (modified form)	Wooler Institution		
	Eastern half of Glendale R.D.	5,000 approx.	70,000	.07						Several car hirers at Bedford have stretchers made to fit their saloon cars to convert them to ambulances.
	Belford R.D. ...	4,521	39,797	.1	1	Belford (Mobile)				
II	Alnwick U.D. ...	6,896	4,778	1.4	1	Alnwick ...	1 at Alnwick	Alnwick Infirmary	1	Jointly owned by Alnwick U. and R. Authorities.
	Alnwick R.D. ...	12,450	93,035	.13	1	Shilbottle Colliery				
	Amble U.D. ...	4,175	1,258	3.3	1	Amble				
III	Morpeth B. ...	7,595	327	23.2	1	Morpeth	1 at Morpeth	Morpeth Cottage Hospital	1	Privately owned.
	Morpeth R.D. ...	17,431	84,500	.2	4	Pegwood Widdrington Colliery Ellington Broomhill ...				
IV	Ashington U.D. ...	29,910	3,039	9.8	3	1 each for Ashington, North and South Hirst	1 at Ashington	Ashington Hospital	3	Ashington Hospital Committee.
	Lynemouth Parish	1,759	344	5.1	1	Woodhorn Colliery				
	Newbiggin U.D. ...	6,842	1,028	6.6	1	Lynemouth			1	Newbiggin Colliery Welfare Committee.
	Bedlington U.D. ...	27,270	8,520	3.2	1	Newbiggin... North Seaton Bedlington Bedlington Colliery			2	Bedlington Colliery.
					1	Netherton Colliery			1	Netherton Colliery.
					1	Choppington Colliery	1 at Bedlington		1	Choppington Colliery.
					1	West Sleekburn Colliery				Normally served by Bedlington Colliery Ambulance.
					1	Cambois Colliery			1	Cambois Colliery.

Area No.	Constituent Parts.	Population.	Acreage.	Density per acre.	First Aid Parties.		First Aid and Decontamination Centres.	Casualty Clearing Hospitals.	Motor Ambulances.	
					No. in Depot.	Located at			No.	Where kept.
V	Blyth Borough... Seaton Valley U.D. (north of a line Annitsford—Seghill—Holywell, inclusive)	31,822 15,000 approx.	4,319 7,000 approx.	7.3 2.1	3	Blyth Belside	Blyth Seaton Delaval	Blyth Knight Memorial Hospital	1	Owned by Local Authority.
					1	New Delaval			1	Owned by Hartley Main Collieries, Ltd. (for Cramlington and Seaton Delaval).
					1	Shankhouse				
					1	Cramlington				
					1	West do.				
VI	Seaton Valley U.D. (south of a line Annitsford—Seghill—Holywell, inclusive) Whitley & Monkseaton U.D. Tynemouth C.B.	13,000 approx. 28,109 65,000 approx.	4,700 approx. 3,998 4,400 approx.	2.7 7.03 14.7	1	Backworth	Earsdon Whitley Bay North Shields	Tynemouth Jubilee Infirmary	2	(a) Backworth Coal Co.; (b) Miners' Welfare Committee.
					1	Earsdon			1	Owned by Local Authority.
					1	Shiremoor			2	Owned by Local Authority.
					1	Monkseaton				
					2	Whitley Bay				
VII	Wallsend Borough ...	44,587	3,422	13.0	1	Tynemouth	Wallsend	Wallsend Infirmary	2	Owned by Local Authority.
					2	North Shields			1	St. John's Ambulance Association and several owned by private firms, colliery and dock.
					1	Billy Mill				
VIII	Longbenton U.D. ...	21,201	6,785	3.1	1	Chirton	Dudley		1	Local Authority.
					1	Percy Main			1	Owned by Colliery Companies.
					2	Wallsend				
					1	Rosehill				
IX	Gosforth U.D. ...	18,446	1,739	10.6	1	Willington Quay	Gosforth	R. V. Infirmary, Newcastle	2	Local Authority.
					1	Howdon				
					1	Benton				
X	Gosforth U.D. ...	18,446	1,739	10.6	1	Clousden Hill	Gosforth	R. V. Infirmary, Newcastle	1	Local Authority.
					1	Burradon			1	Owned by Colliery Companies.
					1	Dudley			1	
					1	Seaton Burn			1	

Area No.	Constituent Parts.	Popula- tion.	Acreage.	Den- sity per acre.	First Aid Parties.		First Aid and Decontamination Centres.	Casualty Clearing Hospitals.	Motor Ambulances.		
					No. in Depot.	Located at			No.	Where kept.	
X	Newburn U.D....	19,107	4,648	4.1	1	Lemington	Newburn	Newburn Cottage Hospital	1	Local Authority.	
					1	Newburn					
					1	Walbottle					
					1	Throckley					
					1	Westerhope					
XI	Castle Ward R.D. ...	12,494	82,827	.15	1	Ponteland (Mobile)	Dinnington Colliery			Certain collieries have ambulances.	
					1	Woolsington Air Port					
					1	Dinnington Colliery					
					1	Dinnington					
XII	Hexham U.D. ...	8,952	5,150	1.7	1	Hexham (Mobile)	Hexham	Corbridge C.S. Hos- pital also—see plan. Hexham War Mem- orial Hospital	1	British Red Cross Society.	
					1	Corbridge					
					1	Prudhoe					
XIII	Haltwhistle R.D. ...	8,649	96,327	.08	1	Haltwhistle (Mobile)	Haltwhistle	Haltwhistle War Memorial Hospital		None available.	
XIV	Bellingham R.D. ...	5,147	246,645	.02		In such wide-spread and sparsely popu- lated areas the organisation of First Aid Parties hardly seems feasible, but if considered essential mobile units might be centred on Bellingham and Rothbury		Haltwhistle War Memorial Hospital Alnwick Infirmary		Nearest available is at Hexham. A privately owned (?) am- bulance is available.	
											Rothbury R.D. ...

Hospital Accommodation.

An estimate has been supplied from the Air Raid Precautions Department, Home Office, of the number of beds required in Casualty Clearing Hospitals and Base Hospitals in each area of the County. This estimate is based on two factors, the density of the population and the liability to attack of the individual area. The estimate is submitted in the form of a statement of the number of beds required in each type of hospital at the outset and after 4, 7, 10, 14, 21 and 28 days of war. A statement is added that "additional base hospital beds may be required after the first month, but this matter can be left over for the present."

The general position with regard to hospital accommodation is set out in the schedule which follows. It may be said at once that existing accommodation is hopelessly inadequate to meet the Home Office scale of requirements. Excluding Newcastle, which has a problem of its own in this respect at least as difficult as that of the County, the position may be summarised as follows:—

- (a) *Casualty Clearing Hospitals.* The County is expected to provide 438 beds at the outset, rising to 1,085 after 28 days. For this type of accommodation the small local hospitals should be used, and working on the most recently available figures of their "daily occupied bed-state" there would be a shortage at the outset of at least 260 beds, and after 28 days of at least 900 beds.
- (b) *Base Hospitals.* The County is expected to have available in one or more hospitals of this type 217 beds at the outset, rising to 2,602 after 28 days. None of this accommodation is now available, nor can any of it be obtained in local hospitals as their whole spare bed accommodation will be more than used up for casualty clearing work.

To obviate any suggestion that the County can in any way depend on Newcastle for help in this respect it may be stated now that Newcastle is expected to provide 705 beds in all at the outset and 3,995 in all after 28 days; in other words accommodation more than that of the whole Royal Infirmary at first, and six times that amount one month later.

Base Hospitals must be reasonably well-built and equipped to carry out surgical work of a high order, moreover a large proportion of patients may be expected to require prolonged treatment. This kind of hospital cannot be built rapidly; the staff required is large and needs careful selection, and the administrative costs are high. The suggestion of the Home Office that this County, excluding Newcastle, should provide and maintain an ultimate total of 3,687 hospital beds involves such colossal expenditure that it is suggested that the Home Office be asked whether it is not possible for their estimates to be revised.

Whether such action be taken or not it will be necessary for the Committee to prepare a scheme for the establishment of a Base Hospital of some size. Such an institution should be well outside the area of special danger, should have good access by first-class roads and must have an unfailing water-supply.

In areas No. I., II. and XIII., it seems probable that additional accommodation to be provided by adding temporary wards to the local hospitals would solve the problem, and the same might apply to area XII. The remaining areas, III. to XI. and XIV., would best be served by one large general hospital. For the sake of economy it would be desirable to invite Newcastle to participate in a joint establishment of this kind.

The Committee will appreciate that until a definite policy with regard to Base Hospitals is adopted it will not be possible to put forward suggestions with regard to motor-ambulance transport pools, etc., for clearing from Casualty Clearing Hospitals, nor can estimates of cost, staff, etc., be submitted.

CASUALTY CLEARING HOSPITALS.															BASE HOSPITALS.			
Area No.	Constituent Parts.	Estimated bed requirements Home Office Scale.		Existing Accommodation.					Additional beds required to reach Home Office Scale.		Additional bed requirements Home Office Scale.		Existing Accommodation.					
		At out-set.	After 28 days.	Name of Hospital.	Total No. of beds in Hosp.	Aver. No. occupied daily.	Aver. No. free.	At out-set.	After 28 days.	At out-set.	After 28 days.	Name of Hospital.	No. of beds.					
I.	Berwick Borough Norham R.D. { Glendale R.D. (Eastern half) Belford R.D.	8	20	Berwick Infirmary	33	15	18	—	2	—	4	48	Nil.	—				
II	Alnwick U.D. Alnwick R.D. Amble U.D.	8	20	Alnwick Infirmary	25	18	7	1	13	—	4	48	Nil.	—				
III	Morpeth Borough Morpeth R.D. { Less Lynemouth	12	30	Morpeth Cottage Hospital	13	6	7	5	23	—	Areas III to XI inclusive and XIV Home Office estimate for Base Hospitals at outset 190 beds, after 28 days 2,280 beds.							
IV	Ashington U.D. Newbiggin U.D. Bedlington U.D. Lynemouth Parish	60	150	Ashington Hospital	46	34	12	48	138	—	No accommodation available at present.							
V	Blyth Borough Seaton Valley U.D. { (Northern half)	44	110	Knight Memorial Hospital	30	28	2	42	108	—	—	—	—	—				
VI	Seaton Valley U.D. (Southern half) Whitley & Monk-seaton U.D. Tynemouth C.B.	145	365	Tynemouth Jubilee Infirmary	80	—	—	at least 65	at least 285	—	—	—	—	—				

Area No.	Constituent Parts.	CASUALTY CLEARING HOSPITALS.										BASE HOSPITALS.			
		Estimated bed requirements Home Office Scale.		Existing Accommodation.						Additional beds required to reach Home Office Scale.		Estimated bed requirements Home Office Scale.		Existing Accommodation.	
				At out-set.	After 28 days.	Name of Hospital.	Total No. of beds in Hosp.	Aver. No. occupied daily.	Aver. No. free.						
VII	Wallsend Borough ...	75	190			Wallsend Infirmary	20	—	—	at least 55	at least 170	—	—	—	—
VIII	Longbenton U.D. ...	20	50			None ...	—	—	—	20	50	—	—	—	—
IX	Gosforth U.D.	18	45			None ...	—	—	—	18	45	—	—	—	—
X	Newburn U.D. ...	12	30			Newburn Cottage Hospital	14	—	—	at least 2	at least 16	6	72	Nil.	—
XI	Castle Ward R.D. ...	5	13			None ...	—	—	—	5	13	—	—	—	—
XII	Hexham U.D. Hexham R.D. Prudhoe U.D. }	20	50			Hexham War Memorial Hospital	40	20	20	—	30	10	118	Nil.	—
XIII	Haltwhistle U.D. ...	5	5			Haltwhistle War Memorial Hospital	17	9	8	—	—	1	12	Nil.	—
XIV	Bellingham R.D. Rothbury R.D. Glendale R.D. (Western half) }	5	10			None ...	—	—	—	5	10	2	24	Nil.	—

First Aid and Hospital Personnel.

It is suggested in Memorandum A.R.P.1 that co-operation with local units of the St. John Ambulance Brigade and the British Red Cross Society will probably be the best means of finding staff for First Aid Dépôts, etc. To that end it is suggested that when the general lay-out of the County scheme has been approved by the Committee and submitted to Local Authorities a conference be held with the County Commandants of the Brigade and Society.

If First Aid Dépôts are placed at or near collieries, shipyards or large works it would probably be easy to find a number of trained first-aid men working nearby.

It will be necessary to make special arrangements to obtain the staffs of First Aid and Decontamination Centres on which persons of both sexes must be available.

Anti-gas training will be necessary for all concerned.

It must be remembered that on a general mobilisation many members of the St. John Ambulance Brigade who are Navy or Army Reservists will be called to the Colours. It may well be found that the supply of trained men will be insufficient and the possible necessity of establishing special training centres now should be explored.

It will be necessary to consider whether First Aid personnel are to be expected to give their services voluntarily or are to be paid. Hospital personnel, who would normally be employed whole-time, must be paid.

A special problem will arise in the shape of obtaining doctors, and more particularly nursing staff, for Base Hospitals. Most of the work there will be with surgical cases and a large proportion of the nursing staff must be fully trained.

Control.

It is assumed that, for the sake of cohesion, command of the Air Raid Precaution service of the County in all its branches will be placed in the hands of one individual or County Director. He should have a number of Deputies, each responsible for one special branch of the service.

The First Aid and Hospital organisation would require two deputies whose duties would be as follows :—

- (a) *Deputy Director (First Aid Staff).*—The organisation, administration and training of First Aid or Reserve Parties and personnel of First Aid and Decontamination Centres. He would be assisted by Area and District Officers corresponding to the subdivision of the County in the schedules on pages 115 and 120. The ultimate task of his department would be to see that trained rescue parties are always available and that a full staff is “at call” for each First Aid and Decontamination Centre. His department would be responsible for the care of casualties until they reach the First Aid Centre.

This Officer might well be a senior official of the St. John Ambulance Brigade.

- (b) *Deputy Director (Medical)* will be responsible for :—

- (1) organisation and administration of Base Hospitals;
- (2) liason with British Red Cross Society;
- (3) administration of Casualty Clearing Hospitals in so far as air-raid casualties are concerned;

- (4) medical arrangements in First Aid and Decontamination Centres, through the local medical officers in charge;
- (5) transport of casualties after they leave the First Aid and Decontamination Centres;
- (6) records.

Co-operation and Command.

As it was felt that it was necessary first of all to ascertain the minimum probable requirements of the County districts nothing has yet been suggested in the outline scheme about the extent of the co-operation with the St. John and British Red Cross organisations which will be essential.

Taking these schedules as an approved basis it is now suggested that a conference be held with the County Commandant of the St. John Ambulance Brigade to ascertain to what extent the co-operation of that body will be available. If details of the St. John organisation can be obtained at first in so far as concerns their "district control" it will probably be found that the areas in the schedules on pages 115 to 120 can be grouped in suitable combinations so that the fifteen areas can be brought under the control of four or five "Group Officers."

Conversation with a St. John County Officer a few days ago left the impression that that organisation would, on a general mobilisation be drained to a very large extent of its trained personnel by naval and military requirements. This suggests that, instead of relying in time of war on existing trained members of the Brigade, the help of the St. John organisation be invited in training an entirely separate "Air Raid Staff" to consist as far as possible of individuals who would not be liable for naval or military service under an ordinary conscription act. At the same time some older trained St. John officers would probably be available to act as officers of First Aid Depôts and First Aid and Decontamination Centres, and also in higher commands. It will, therefore, be necessary to decide whether the individuals forming the Rescue Party, etc. organisation are to become or to remain actual members of the St. John Ambulance Brigade or whether they are to become members of a side-line unit to be designated by some new title "County First Aid Service" or something similar, and kept separate from the Brigade except for training purposes.

One thing which must be settled at a very early date is the system of command. Who is to command the whole organisation, and will members of the St. John Ambulance Brigade and British Red Cross Society be prepared to take orders direct from this commander, or will a multiple system of command be necessary involving the reference of all questions of organisation, training, etc., to the respective County Commandants of the Brigade and Society.

Command of the whole Air Raid Precaution service for the County should be placed in the hands of an officer of general military experience rather than in those of a medical officer. Many of the problems which will arise will be concerned with non-medical matters, transport, administration and so on. This commander, or County Director should have two immediate deputies, one a doctor with wide administrative experience, the other probably a senior officer of the St. John Ambulance Brigade. The Deputy Director (Medical) should be the senior deputy and assume command in the absence of the Director. At present the extent of the co-operation of the British Red Cross Society is undecided: if existing civil hospitals only are to be used it would probably be small, but if it were necessary to staff a Base Hospital with members of the B.R.C.S., a representative of that organisation would be required on the staff of the Deputy Director (Medical).

The Director would be responsible for the general organisation of the whole scheme.

The duties of the Deputy Director (Medical) would include—

- (1) organisation and administration of Base Hospitals;
- (2) general oversight of air-raid casualties in Casualty Clearing Hospitals. These are existing civil hospitals and his measure of control therein would be circumscribed;
- (3) treatment of casualties in First Aid and Decontamination Centres. The staffing of these centres is dealt with in a later paragraph.

He should have an assistant, not a doctor, to deal with ambulance transport. This Transport Officer and his assistants should deal with all movement of patients after they have once reached a First Aid and Decontamination Centre. Under heavy pressure it might become necessary to switch patients to hospitals other than those laid down in the schedule scheme, and this would be a matter for the Medical rather than the "Rescue Party" administration.

The duties of the Deputy Director (First Aid Staff) would be the organisation, administration and training of First Aid or Rescue Parties and personnel of First Aid and Decontamination Centres. He would be assisted by Group and District Directors; it is suggested that the Districts be the "Areas" defined in the schedules as already considered and that the Groups be clumps of Districts to conform to existing St. John Ambulance Brigade organisation if possible.

All questions of the length of shifts to be worked, etc., will rest with the Deputy Director (F.A.S.). His ultimate task will be to see that trained rescue parties are always available and that a full staff is always "at call" for each First Aid and Decontamination Centre. His side of the organisation will be responsible for the care of casualties until they reach the First Aid and Decontamination Centre at which point they will come under, and thenceforward remain under, the control of the Deputy Director (Medical) through his representative Medical Officer.

The medical officer in charge of a Centre will decide which cases need hospital treatment and which cases may be sent home after dressing or decontamination or both.

The staff of a Centre while on duty there will be under the orders of the medical officer in charge but he will not be required to deal with matters of staff organisation which will be the affair of the District Officer of the Deputy Director (First Aid Staff). The idea underlying this suggestion is that medical officers in charge of Centres will be drawn from a roster of local general practitioners who will be at call for shifts, probably corresponding to the working shifts of the Centre staffs. These medical officers, who will also be doing their normal civil work cannot be expected to undertake organisation in connection with Air Raid Centres as well, nor is it desirable that they should do so.

Motor Ambulances.

In the schedules 32 ambulances are mentioned. This figure must be regarded as approximate, it is based on information obtained from Local Authorities about two years ago and some changes may have been made since then.

Of the 32 ambulances, 12 belong to Local Authorities, 17 belong to Colliery Companies or Miners' Welfare Committees, 1 to the British Red Cross Society, and 2 are owned privately. It remains to be seen

how far these ambulances would be at the disposal of the air raid precaution organisation. The Local Authorities would almost certainly agree to theirs being available but there might be some difficulty in obtaining the use of colliery ambulances. It would have to be very clearly understood that in an emergency all the ambulances of any one area would be required to come under the instructions of the Director and remain so while the emergency existed. There will probably be objection on this point from the Colliery Companies. The private owners would be likely to agree to some suitable basis of employment.

Most of the areas are fairly well served, but there are outstanding exceptions. Areas No. I. (Berwick with one ambulance), No. II. (Alnwick with one), No. X. (Newburn with one), No. XI. (Castle Ward, none except an uncertain number at collieries), No. XIII. (Haltwhistle, none), No. XIV. (Bellingham, none), and No. XV. (Rothbury, one uncertain privately owned), all need consideration.

The expense of providing additional ambulances for individual areas would be great; an alternative worth consideration would be to have a small ambulance "pool" at the Base Hospital, say four to six vehicles. The pool ambulances could be sent out to any raided area to collect casualties from First Aid and Decontamination Centres or from Casualty Clearing Hospitals and would make it unnecessary for the local ambulances to leave their home area, except, perhaps, if the number of casualties were very large. Some arrangement of this kind would be economical and would help to remove any objection on the part of Collieries and Welfare Committees.

Base Hospital.

The following considerations are submitted as to the relative merits of Stannington, Wooley and Barrasford as possible Base Hospitals.

It must be remembered that the majority of casualties admitted to a Base Hospital will be surgical in character and may be of a very serious nature. Stannington Sanatorium has a first-rate operating theatre with a staff trained to deal with surgical cases, and there is also a modern X-ray installation. The other two Sanatoria have not got the same facilities for surgical work.

Stannington is much nearer to the area of special danger than either Wooley or Barrasford. This is important in that a shorter trip by motor ambulance is involved thereby lessening the discomfort and danger to patients and enabling more patient-trips to be obtained from a limited number of ambulances. Furthermore, Stannington is close to a main trunk-road and is easy of access from the more dangerous coastal areas. To take patients either to Wooley or Barrasford would involve a long cross-country journey, they are each about 25 miles from the coast and an ambulance running without lights at night would probably not be able to make more than one trip.

Casualties admitted to a Base Hospital will include a considerable proportion of serious cases whose stay in hospital will be a long one. Relatives and friends will desire to visit them and considerable hardship would be entailed if such visiting necessitated a long country journey, and in emergencies it might be impossible to get hold of relatives in time to see dying patients. The services of surgical consultants from Newcastle will be essential; these gentlemen have little time for travelling and their convenience must be considered. In all these respects the advantage lies with Stannington.

These various points have been taken into consideration in allotting different base-hospitals to Areas No. I., II., X., XII. and XIII., all of which lie some distance from Stannington and are areas unlikely

to have many casualties. As far as the number of beds available in these hospitals is concerned there is no doubt that the number is small. It varies from day to day and it would never be safe to count on any particular number of empty beds in a crisis. But the risk of air-raids in these localities is small and it seems more economical to use up these beds first and send any surplus of cases to a central base-hospital than to make special base-hospital provision for these areas.

There are several possible methods of securing the necessary accommodation at Stannington. That sanatorium has 300 beds, of which approximately 100 are occupied by surgical and 200 by medical cases of tuberculosis. The importance of that distinction lies in the fact that it would probably be possible to evacuate all the medical cases to other sanatoria or to temporary wards at Stannington, but it would be essential to leave the surgical cases undisturbed.

The following suggestions should be considered :—

- (1) evacuate the medical T.B. cases from Stannington as required, say 50 at a time, either to
 - (a) temporary wards (army-hut type) to be built at Stannington, or to
 - (b) temporary wards to be built at Wooley or Barrasford.
- (2) Allow the T.B. cases at Stannington to remain in their present wards and build temporary wards for air-raid casualties.

Very little, if any hardship would be inflicted on the children evacuated to temporary wards. They would all be of "convalescent" type and might not come to any harm even if it became necessary to send them home for a time.

The actual number of casualties for whom provision should be made in the first instance is open to a great deal of discussion. It should be not less than 50 and it would be safer to put it at 100. If the accommodation provided begins to fill up, another 50 beds should be prepared, and so on.

Whatever the system adopted, staffing should not present much difficulty but that question can hardly be discussed until a system of providing beds is chosen.

Personnel—Conditions of Service.

Before any approach is made to the St. John Ambulance Brigade it should be considered whether the First Aid Parties and the staff of the First Aid and Decontamination Centres are to receive any remuneration for their services or are they to be expected to serve voluntarily.

For this work to be carried out satisfactorily a high standard of discipline will be essential, entailing among other things remaining "at call" during fixed shifts over long periods without ever being called out for duty. Even the most enthusiastic first-aid worker is likely to become bored and discouraged under such circumstances and it will probably be found necessary to add some form of financial inducement. A very large number of individuals will be required to complete the staffs and it may not be possible to find volunteers for free service to the required extent.

It is very probable that at the beginning of the next war whatever government is in power in this country will introduce a general conscription bill. This ought to be borne in mind in recruiting for this Air Raid Precaution Service lest it become a means of evading conscription by securing exemption.

Up to this stage, and indeed for some considerable time afterwards, the County Council was merely a co-ordinating Authority.

The following is extracted from the report of the Air Raid Precautions Committee to the meeting of the County Council on the 5th August, 1937 :—

“ The Local Authorities are at present responsible for all organisation and provision, provided they keep within the requirements of the Home Office, and so far as co-ordination goes, they may or may not agree to accept the advice given them by the County. Moreover, under the present scheme it may be found that certain areas are either negligent, indifferent or behindhand in the preparation of their schemes, and, while such is the case, they are not only a source of danger to their own inhabitants, but also a source of weakness and danger to their neighbours. Again, certain areas are entirely and completely dependent for all their main services on neighbouring authorities, e.g., Longbenton Urban District depends for its fire fighting on Gosforth Urban District and Wallsend Borough. Newbiggin depends entirely on Ashington, Morpeth Rural District on Morpeth Borough, Castle Ward on Gosforth and Newburn, and so on, and the same dependence exists when it comes to casualty clearing hospitals, ambulances and the medical side generally.

“ To meet some of these difficulties, the Committee suggest a scheme on the following lines :—

“ (1) The County Air Raid Precautions Committee to be re-constituted.

“ (2) The County to be divided into two parts for purposes of Air Raid Precautions organisation, viz. :—

(a) The vulnerable part consisting of the Urban Districts (except Alnwick) and Boroughs and a small portion of the Rural Areas adjoining.

(b) The remainder of the County composed chiefly of rural areas.

“ The area comprised in (a) is to include the area bounded on the north by the Coquet with Amble to the east and Felton to the north-west, then east of a line Felton to Stannington, Stannington to one mile west of Ponteland, i.e., the west limit of Ponteland parish, Ponteland south-west to Whittle Dene Reservoirs, then along the Military Road to Chollerford, thence to Warden and circling Hexham south along a line about $1\frac{1}{2}$ miles south of the Tyne to the County Boundary near South Wylam.

“ This area to be sub-divided into districts :—

- (i) ASHINGTON from north limit of area (a) to south boundary of Bedlingtonshire and to include Amble, part of Alnwick Rural (south of Coquet), Morpeth Borough, part of Morpeth Rural, Newbiggin Urban.
- (ii) BLYTH with Urban District of Seaton Valley, part of Castle Ward Rural, Urban District of Whitley and Monkseaton.
- (iii) GOSFORTH with part of Longbenton Urban, and part of Castle Ward Rural.
- (iv) WALLSEND with part of Longbenton Urban.
- (v) NEWBURN with part of Castle Ward Rural, Urban District of Prudhoe, part of Hexham Rural District and Hexham Urban District.

“ This grouping is based on not only the geographical position, but also on road and bridge considerations, and on existing and potential Fire Fighting services, with some regard to hospital and decontamination facilities.

“ (3) The various Local Authorities shall continue to be responsible for such services as the provision and training of Volunteers, selecting and staffing of Wardens’ Posts, First Aid Posts, Rescue Parties and Repair Squads, but the main scheme, for dealing with the problem as a whole, to be framed and controlled by a Committee in each of districts (i) to (v), composed of representatives of each Local Authority in the district. Then a main or COUNTY COMMITTEE shall be appointed to control the whole organisation, such Committee to consist of one representative from each of the districts (i) to (v) with three members appointed by the County Council and certain ex-officio members, i.e., Chief Constable, County Medical Officer, County Surveyor, and representatives of the British Red Cross and St. John Ambulance Brigade.

“ The cost of the scheme will have to be defrayed by the County Council, and the District representatives must have authority to commit their districts on the question of policy. This is essential to the success of the scheme.

“ (4) The districts comprising area (b) will be the area where the County will deal with bad casualties, sick and old people, surplus population, young children, etc., and the organisation of this area will be framed accordingly. Berwick has been omitted from this scheme, as in any event it must stand alone and can in no way help any other part of the County, except to a minor extent the immediately adjoining Rural Areas, while it can look for no help from the nearest Urban Area.

“ The foregoing proposals are made with the intention of producing a complete scheme for the County at an early date, and in order that effect may be given thereto the Committee recommend that the proposals be submitted to the Local Authorities for their concurrence. It is evident that H.M. Government now realise that the cost of Air Raid Precautions must, to a large extent, be defrayed out of national funds, and an offer of a grant of 70 per cent. of the cost has recently been made by the Home Secretary to the Associations representing Local Authorities. The Committee understand that this was not accepted by the Associations.”

On Saturday, 24th September, 1938, the International situation was becoming increasingly tense. The County Medical Officer received instructions from the Air Raid Precautions Officer to make every preparation against the possibility of air attack. The whole resources of the department were mobilised. Parcels of dressings, surgical equipment of all kinds, blankets, stretchers, lamps and torches were collected and delivered personally to the various First Aid Posts in the County by Medical Officers, Dental Surgeons, Nurses and, indeed, any person who was in possession of a car. The opportunity is taken of expressing gratitude to them for this assistance.

On Sunday, 25th September, 1938, the following letter was issued to all the Medical Officers of Health in the County :—

“ The first-aid posts for your area will be at.....

.....

“ Taking this as your authority, will you please go there and choose two parts of the building, one side for males and the other for females. *Make sure* that the hot water supply is adequate; if

it is not satisfactory, have it made so by a competent man *at once*. Instal immediately arrangements whereby shower baths for each sex may be available; see that adequate drainage is secured and the surfaces smoothly concreted; for the present rubber tubing and sprays will make an excellent extemporisation. No unnecessary interference with the structure of the building should be authorised; curtains will serve to divide up the cubicles.

“ Next choose two large rooms (one for each sex) and have hot and cold water and a large sink installed, these to act as casualty treatment rooms. Ask the School Authorities to place store cupboards at your disposal for dressings, etc. Purchase locally hurricane lamps and sanitary bins.

“ Any purchase made by you should be effected on a triplicate order form and signed by you on behalf of the County Medical Officer, the account being forwarded to me with a carbon copy of the original order; some rough estimate of the cost should be obtained before the work is commenced, and your personal supervision should be given to its execution. The necessary surgical equipment has been ordered and so soon as it is available you will be informed, and *you* will be expected to make arrangements for its collection.

“ Get on with the formation of your first-aid classes. Nominate some man as commandant, preferably the local superintendent of the St. John Ambulance Association or the British Red Cross. He should be a man of courage and initiative. He must report to you and will take his instructions from you and no one else. Any telephone message to the County Medical Officer should be confirmed by letter.

“ Bulletine letters will be issued as and when required; these should be filed for reference. All A.R.P. correspondence will be issued on buff stationery.

“ With regard to the erection of partitions in rooms, unless compelled to do this, do not do so, rather purchase a supply of cheap screens.

“ You will appreciate the gravity of this statement and the necessity for regarding it as a secret communication. The steps taken to put the work into execution should be done quietly and without ostentation to avoid creating public panic.

“ Will you please acknowledge receipt of this communication and report to me immediately what action you have taken.”

WILLIAM F. J. WHITLEY,
County Medical Officer.

Thereafter, bulletins were issued until the strain was relieved by the Munich Agreement.

It is interesting to note that, despite the gravity of the situation at this point, one or two of the Authorities in the most vulnerable areas of the County did absolutely nothing, and repeated attempts to stimulate them failed to elicit any response.

During the rest of the year, every attempt was made to consolidate the position.

Shortly after this, the Ministry of Health took over the First Aid services and another new policy was commenced.